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Sixth Edition

*Exploring*  
Social Psychology




David G. Myers

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# Exploring Social Psychology

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# Exploring Social Psychology

SIXTH EDITION



David G. Myers

*Hope College*





EXPLORING SOCIAL PSYCHOLOGY, SIXTH EDITION

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# About the Author



Since receiving his Ph.D. from the University of Iowa, David Myers has spent his career at Michigan's Hope College and has taught dozens of social psychology sections. Hope College students have invited him to be their commencement speaker and voted him "outstanding professor."

Myers's scientific articles have appeared in some three dozen scientific periodicals, including *Science*, the *American Scientist*, *Psychological Science*, and the *American Psychologist*.

He also communicates psychological science to the general public. His writings have appeared in four dozen magazines, from *Today's Education* to *Scientific American*. His seventeen books include general audience books, such as *The Pursuit of Happiness* and *Intuition: Its Powers and Perils*.

David Myers has chaired his city's Human Relations Commission, helped found a thriving assistance center for families in poverty, and spoken to hundreds of college and community groups. Drawing on his own experience, he also has written about hearing loss (*A Quiet World*), and he is advocating a revolution in American hearing-assistance technology ([www.hearingloop.org](http://www.hearingloop.org)).

He bikes to work year-round and plays daily pick-up basketball. David and Carol Myers married while students at Whitworth University and are parents of two sons and a daughter.





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# Preface



This is a book I secretly wanted to write. I have long believed that what is wrong with all psychology textbooks (including those I have written) is their overlong 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, before laying the book down 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 and comparatively economical, we sought to enable instructors to supplement it with other reading.

As the playful module titles suggest, 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.” My 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. I 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, I have represented social psychology’s scope, highlighting its scientific study of how we think about, influence, and relate to one another. I 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, one can present social psychology in ways that inform and stimulate all students.

This new sixth edition features updated coverage throughout. In addition, the sixth edition features technology components designed to assist both professor and student. Icons throughout the text guide the student to the Online Learning Center ([www.mhhe.com/myersesp6e](http://www.mhhe.com/myersesp6e)) to gather more information on each module by viewing excerpts from the Social Connection video modules, participating in interactive exercises, and taking module quizzes to test their knowledge. The Social Connection video modules, produced by Frank Vattano at Colorado State University, enrich classic experiments by re-creating or providing footage from classic experiments, seasoned with interviews of leading social psychologists.

A comprehensive teaching package is also available on the Online Learning Center. The acclaimed *Instructor's Resource Manual* has been revised to reflect changes in the sixth edition text. The OLC also includes a Test Bank, which has also been revised to include a higher concentration of conceptual questions, and a set of PowerPoint slides to use in the classroom. All instructors' resources are password-protected.

## ACKNOWLEDGMENTS

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

I am grateful not only to Chris Rogers, for venturing this book, but also to editor Philip Zimbardo for his encouragement. As my friendship with Phil has grown, I have come to admire his gifts as one of psychology's premier communicators. Others on the McGraw-Hill team also played vital roles. Executive editor Mike Sugarman encouraged and commissioned this new edition and editorial coordinator Augustine Laferrera, developmental editor Janice Wiggins-Clarke, and managing editor Marley Magaziner supported us throughout the revision process.

A special "thank you" goes to Jean Twenge, San Diego State University, for her contribution to Module 3 (Self-Concept: Who Am I?) and Module 4 (Self-Serving Bias). Drawing on her extensive knowledge of and research on the self and cultural changes, Professor Twenge updated and revised this material for *Social Psychology, 10th Edition*.

Here at Hope College, Kathryn Brownson helped digest the *Social Psychology*, 10th edition material into these modules and prepare them for production. As in all of my published social psychology books with McGraw-Hill, I again 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 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, I am indebted. Working with all these people has made my work a stimulating, gratifying experience.

David G. Myers  
*www.davidmyers.org*

## 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.



Video  
1.1

In the first two modules I 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*.



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MODULE

1



# *Doing Social Psychology*

**T**here 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 humble 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).

We are all amateur social psychologists. People-watching is a universal hobby. As we observe people, we form ideas about how human beings think about, influence, and relate to one another. Professional social psychologists do the same, only more systematically (by forming

theories) and painstakingly (often with experiments that create miniature social dramas that pin down cause and effect). And they have done it extensively, in 25,000 studies of 8 million people by one count (Richard & others, 2003).

## FORMING AND TESTING THEORIES

We social psychologists have a hard time thinking anything could be more fascinating than human existence. As we 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, for example, 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 an observed fact.

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 the pioneering social psychologist Kurt Lewin, declared, “There is nothing so practical as a good theory.”

Consider how this works. Say 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 (I’m playing with this theory) we could devise a laboratory experiment simulating aspects of execution by electric chair. What if we asked 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 administer stronger shocks than individuals acting alone, as our theory predicts?

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's not because they have been proved false. Rather, like old cars, they are replaced by newer, better models.

## CORRELATIONAL RESEARCH: DETECTING NATURAL ASSOCIATIONS

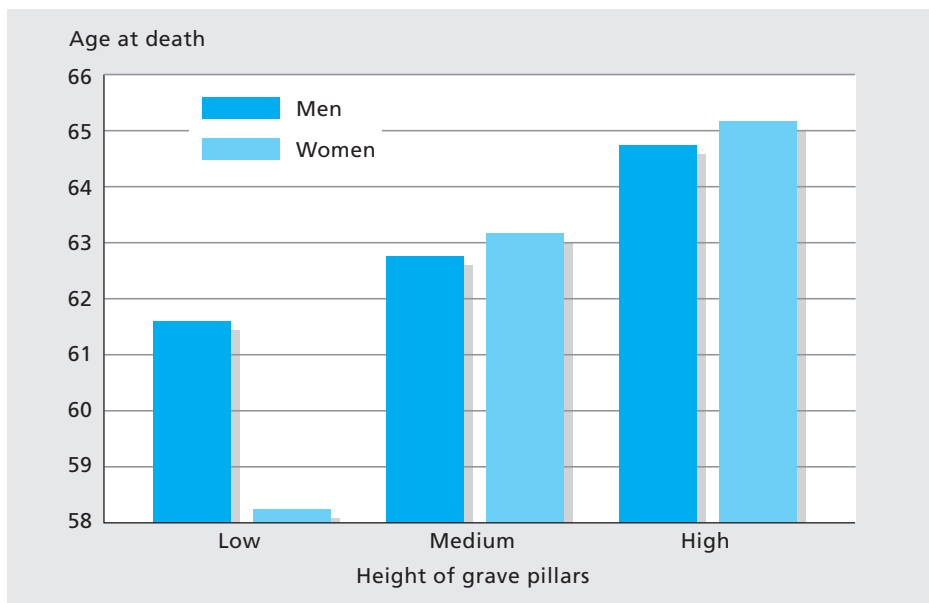
Most of what you will learn about social-psychological research methods you will absorb as you read later chapters. But let's now go backstage and see how social psychology is done. This glimpse behind the scenes should be just enough for you to appreciate findings discussed later. Understanding the logic of research can also help you think critically about everyday social events.

Social-psychological research varies by location. It can take place in the *laboratory* (a controlled situation) or in the **field** (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 newspapers and magazines, it will pay to understand the difference between correlational and experimental research.

Using some real examples, 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). Today's psychologists relate personal and social factors to



Activity  
1.1



**FIGURE 1-1**

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

human health. Among the researchers have been Douglas Carroll at Glasgow Caledonian University and his colleagues, George Davey Smith and Paul Bennett (1994). In search of possible links between socioeconomic status and health, the researchers ventured into Glasgow's old graveyards. As a measure of health, they noted from grave markers the life spans of 843 individuals. As an indication of status, they measured the height of the pillars over the graves, reasoning that height reflected cost and therefore affluence. As Figure 1-1 shows, taller grave markers were related to longer lives, for both men and women.

Carroll and his colleagues report that other researchers, using contemporary data, have confirmed the status-longevity correlation. Scottish postal-code regions having the least overcrowding and unemployment also have the greatest longevity. 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 & others, 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 terribly 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)? 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 changing one variable (such as social status) will *cause* changes in another (such as health).

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 (1999), Martin Seligman (1994, 2002), and Roy Baumeister and colleagues (2003, 2005), doubt that self-esteem is really “the armor that protects kids” from underachievement (or drug abuse and delinquency). Perhaps it’s 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’s also possible that self-esteem and achievement correlate because both are linked to underlying intelligence and family social status. That possibility was raised in two studies—one a nationwide sample of 1,600 young American men, another of 715 Minnesota youngsters (Bachman &

O'Malley, 1977; Maruyama & others, 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 twenty-sixth 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

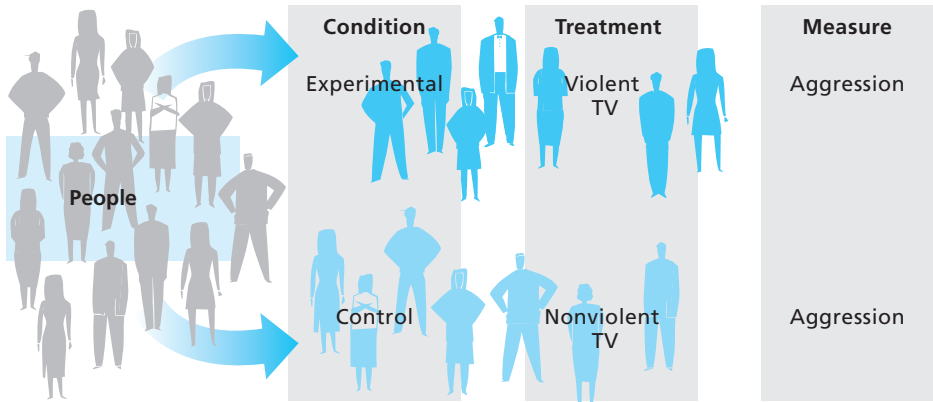
The difficulty of discerning cause and effect among naturally correlated events prompts most social psychologists to create laboratory simulations of everyday processes whenever this is feasible and ethical. These simulations are akin to aeronautical wind tunnels. Aeronautical engineers don't begin by 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.

### *Control: Manipulating Variables*

Like aeronautical engineers, 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.

Historically, social psychologists have used the experimental method in about three-fourths of their research studies (Higbee & others, 1982), and in two out of three studies the setting has been a research laboratory (Adair & others, 1985). 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.* Are children learning and reenacting what they see on the screen? As I hope you now recognize, this is a correlational finding. Figure 1-2 reminds us that there are two other cause-effect interpretations. (What are they?)



**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.

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 his colleagues (1995) showed some elementary school children, 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 two-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*.

### *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 hasn't considered.

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—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 some conceivable experiments raise ethical issues. Social psychologists would not, over long time 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, enjoyable experience to which people give their knowing consent. Sometimes, 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 need not have what Elliot Aronson, Marilynn Brewer, and Merrill Carlsmith (1985) call **mundane realism**. That is, laboratory behavior (for example, delivering electric shocks as part of an experiment on aggression) need not be literally the same as everyday behavior. For many researchers, that sort of realism is indeed mundane—not important. But the experiment *should* have **experimental realism**—it should engage the participants. Experimenters do not want their people consciously play-acting or ho-humming it; they want to engage real psychological processes. Forcing people to choose whether to give intense or mild electric shock to someone else can, for example, be a realistic measure of aggression. It functionally simulates real aggression.

Achieving experimental realism sometimes requires deceiving people with a plausible cover story. If the person in the next room actually is not receiving the shocks, the experimenter does not want the participants to know that. That would destroy the experimental realism. Thus, about one-third of social-psychological studies (though a decreasing number) have used deception in their search for truth (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. 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 being filmed for national broadcast 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 (2002), the Canadian Psychological Association (2000), and the British Psychological Society (2000) mandate investigators to do the following:

- 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. 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 children, television, and violence illustrates, social psychology mixes everyday experience and laboratory analysis. Throughout this book we will do the same by drawing our data mostly from the laboratory and our illustrations 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. The consistency of findings on television's effects—in the lab and in the field—is true of research in many other areas, including studies of helping, leadership style, depression, and self-efficacy. The effects one finds in the lab have been mirrored by effects in the field. "The psychology laboratory has generally produced psychological truths rather than trivialities," note Craig Anderson and his 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. 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 (their attitudes, for example) 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 have 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, low self-esteem (Jones & others, 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

**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.

**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.

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MODULE

2



# *Did You Know It All Along?*

*Anything seems commonplace, once explained.*

Dr. Watson to Sherlock Holmes

**S**ocial 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, a few of which I paraphrase:

1. Better-educated soldiers suffered more adjustment problems than did less-educated soldiers. (Intellectuals were less prepared for battle stresses than 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 privates were more eager for promotion than were Black privates. (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—certainly less surprising than it is to people who are simply told about the experimental procedure and the possible outcomes (Slovic & Fischhoff, 1977).

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 & others, 2008). 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.” After the widespread flooding in New Orleans as a result of Hurricane Katrina in 2005, it seemed obvious that public officials should have anticipated the situation: Studies of the levees’ vulnerability had been done. Many residents did not own cars and were too poor to afford transportation and lodging out of town. Meteorologic assessment of the storm’s severity clearly predicted an urgent need to put security and relief supplies in place. 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:



Activity  
2.1

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.” My 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 morning of 9/11 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), which included the following. 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 coordinated 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 six 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.

In the aftermath of the 2008 world financial crisis, it seemed obvious that government regulators should have placed safeguards against the ill-fated bank lending practices. But what was obvious in hindsight was unforeseen by the chief American regulator, Alan Greenspan, who found himself “in a state of shocked disbelief” at the economic collapse.

We sometimes blame 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.” 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, don’t find the diagnosis nearly so obvious (Dawson & others, 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 jested that 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 common-sense 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*.

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## PART TWO



# *Social Thinking*

**T**his 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.

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## MODULE

# 3\*

## Self-Concept: Who Am I?

No topic in psychology today is more heavily researched than the self. In 2008 the word “self” appeared in 10,328 book and article summaries in *PsycINFO* (the online archive of psychological research)—more than twelve times the number that 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?) Taken together, your answers define your **self-concept**.

The most important aspect of yourself is your self. You know who you are, your gender, whose feelings and memories you experience.

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,



Activity  
3.1

\* Modules 3–5 were co-authored by Jean Twenge, professor of psychology at San Diego State University. Professor Twenge’s research on social rejection and on generational changes in personality and the self has been published in many articles and books, including *Generation Me: Why Today’s Young Americans Are More Confident, Assertive, Entitled—and More Miserable Than Ever Before* (2006) and *The Narcissism Epidemic: Living in the Age of Entitlement* (with W. Keith Campbell, 2009).

or whatever—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' athletic skills. You will quickly recall sports-related experiences. And you will welcome information that is consistent with your self-schema (Kihlstrom & Cantor, 1984). 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 as center stage and to overestimate the extent to which others notice us. For example, we overestimate our conspicuousness. This *spotlight effect* means that we tend to see ourselves at center stage, so we intuitively overestimate the extent to which others' attention is aimed at us.

Thomas Gilovich, Victoria Medvec, and Kenneth Savitsky (2000) explored the spotlight effect by having individual Cornell University students don embarrassing Barry Manilow T-shirts before entering a room with other students. The self-conscious T-shirt wearers guessed that nearly half their peers would notice the shirt. Actually, only 23 percent did.

What's true of our dorky clothes and bad hair is also true of our emotions: our anxiety, irritation, disgust, deceit, or attraction (Gilovich & others, 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 & others, 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 on page 23? 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. Adolescence is a time of 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.

The psychology of Western cultures assumes that your life will be enriched by believing in your power of personal control. Western literature,

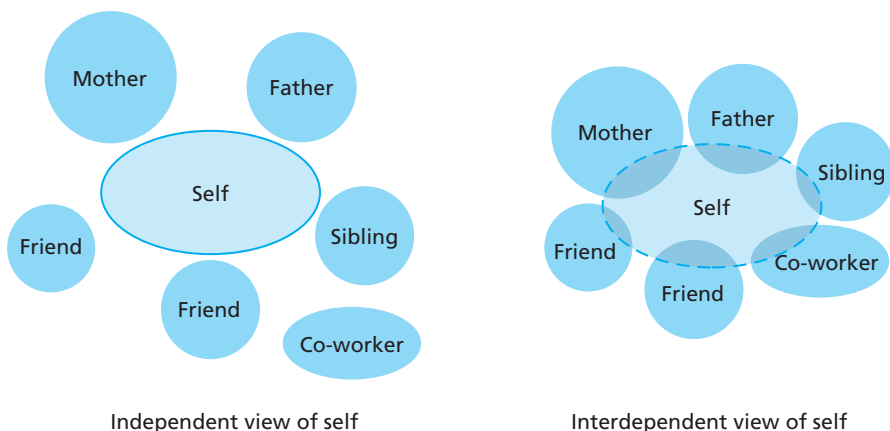
from *The Iliad* to *The Adventures of Huckleberry Finn*, celebrates the self-reliant individual. Movie plots feature rugged heroes who buck the establishment. Songs proclaiming “I Gotta Be Me” declare that “The Greatest Love of All” is loving oneself (Schoeneman, 1994) and state without irony that “I Believe the World Should Revolve Around Me.” Individualism flourishes when people experience affluence, mobility, urbanism, and mass media (Freeman, 1997; Marshall, 1997; Triandis, 1994).

Most cultures native to Asia, Africa, and Central and South America place a greater value on **collectivism**. They nurture what Shinobu Kitayama and Hazel Markus (1995) call the *interdependent self*. In these cultures, people are more self-critical and have less need for positive self-regard (Heine & others, 1999). Malaysians, Indians, 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 & others, 2001; Ma & Schoeneman, 1997). When speaking, people using the languages of collectivist countries say “I” less often (Kashima & Kashima, 1998, 2003). A person might say “Went to the movie” rather than “I went to the movie.”

Pigeonholing cultures as solely individualist or collectivist oversimplifies, because within any culture individualism varies from person to person (Oyserman & others, 2002a, 2002b). There are individualist Chinese and collectivist Americans, and most of us sometimes behave communally, sometimes individualistically (Bandura, 2004). Individualism-collectivism also varies across a country’s regions and political views. In the United States, Hawaiians and those living in the deep South exhibit greater collectivism than do those in Mountain West states such as Oregon and Montana (Vandello & Cohen, 1999). Conservatives tend to be economic individualists (“don’t tax or regulate me”) and moral collectivists (“legislate against immorality”). Liberals, on the other hand, tend to be economic collectivists (supporting national health care) and moral individualists (“keep your laws off my body”). Despite individual and subcultural variations, researchers continue to regard individualism and collectivism as genuine cultural variables (Schimmack & others, 2005).

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 choices more favorably (Kim & Sherman, 2007). The individualized latté—“decaf, single shot, skinny, extra hot”—that seems just right at a North American espresso shop would seem strange in Seoul, note Heejung Kim and Hazel Markus (1999). In Korea, people





**FIGURE 3-1**  
**Self-construal as independent or interdependent.** The independent self acknowledges relationships with others. But the interdependent self is more deeply embedded in others (Markus & Kitayama, 1991).

place less value on expressing their uniqueness and more on tradition and shared practices (Choi & Choi, 2002). Korean advertisements tend to feature people together; they seldom highlight personal choice or freedom (Markus, 2001; Morling & Lamoreaux, 2008).



With an *interdependent* self, one has a greater sense of belonging. If they were uprooted and cut off from family, colleagues, and loyal friends, interdependent people would lose the social connections that define who they are. They have not one self but many selves: self-with-parents, self-at-work, self-with-friends (Cross & others, 1992). As Figure 3-1 and Table 3-1 suggest, the interdependent self is embedded in social memberships.

**TABLE 3-1 SELF-CONCEPT: INDEPENDENT OR INTERDEPENDENT**

	<i>Independent</i>	<i>Interdependent</i>
Identity is	Personal, defined by individual traits and goals	Social, defined by connections with others
What matters	Me—personal achievement and fulfilment; 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

Conversation is less direct and more polite (Holtgraves, 1997), and people focus more on gaining social approval (Lalwani & others, 2006). 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.

## Culture and Self-Esteem

Self-esteem in collectivist cultures correlates closely with “what others think of me and my group.” Self-concept is malleable (context-specific) rather than stable (enduring across situations). In one study, four in five Canadian students but only one in three Chinese and Japanese students agreed that “the beliefs that you hold about who you are (your inner self) remain the same across different activity domains” (Tafarodi & others, 2004).

For those in individualistic cultures, self-esteem is more personal and less relational. Threaten our *personal* identity and we'll feel angrier and gloomier than when someone threatens our collective identity (Gaertner & others, 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 Kitayama (1999), after ten 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 independent 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 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.

## Explaining Our Behavior

Why did you choose where to go to college? Why did you lash out at your roommate? Why did you fall in love with that special person? Sometimes we know. Sometimes we don't. Asked why we have felt or acted as we have, we produce plausible answers. Yet, when causes are subtle, our self-explanations are often wrong. We may dismiss factors that matter and inflate others that don't. People may misattribute their rainy-day gloom to life's emptiness (Schwarz & Clore, 1983). And people routinely deny being influenced by the media, which, they readily acknowledge, affects *others*.

Also thought provoking are studies in which people recorded their moods every day for two or three months (Stone & others, 1985; Weiss & Brown, 1976; Wilson & others, 1982). They also recorded factors that might affect their moods: the day of the week, the weather, the amount they slept, and so forth. At the end of each study, the people judged how much each factor had affected their moods. Even with their attention on their daily moods, there was little relationship between their perceptions of how well a factor predicted their mood and how well it really did. For example, people thought they would experience more negative moods on Mondays, but in fact their moods were no more negative on Mondays than other weekdays. This raises a disconcerting question: How much insight do we really have into what makes us happy or unhappy? As Daniel Gilbert notes in *Stumbling on Happiness* (2007), not much: We are remarkably bad predictors of what will make us happy.

## Predicting Our Behavior

People also err when predicting their behavior. 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 one another's performance with startling accuracy (Lutsky & others, 1993). 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. In one study, college students writing a senior thesis paper were asked to predict when they would complete the project. On average, students finished three weeks later than their "most realistic" estimate—and a week later than their "worst-case scenario" estimate (Buehler & others, 2002)! However, friends and teachers were able to predict just 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).

## 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 have mispredicted 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 male youths 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 more often deny the possibility of being sexually aggressive. When not aroused, one

easily mispredicts how one will feel and act when aroused—a phenomenon that leads 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 do more impulse buying (“Those doughnuts would be delicious!”) than do shoppers who have just enjoyed a quarter-pound blueberry muffin (Gilbert & Wilson, 2000). When we are hungry, we mispredict how gross those deep-fried doughnuts will seem when we are sated. When stuffed, we may underestimate how yummy a doughnut might be with a late-night glass of milk—a purchase whose appeal quickly fades when we have eaten one or two.
- Undergraduates who experienced a romantic breakup were less upset afterward than they predicted they would be (Eastwick & others, 2007). Their distress lasted just about as long as they thought it would, but the heartbroken students were not as hard-hit as they imagined they would be. European track athletes similarly overestimated how badly they would feel if they failed to reach their goal in an upcoming meet (van Dijk & others, 2008).
- When natural disasters like 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 whether 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.
- People overestimate how much their well-being would be affected by warmer winters, weight loss, more television channels, or more free time. Even extreme events, such as winning a state lottery or suffering a paralyzing accident, affect 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 chapter 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 that the emotional traces of such good tidings evaporate more rapidly than we expect.

Moreover, we are especially prone to impact bias after *negative* events. When Gilbert and his colleagues (1998) asked assistant professors to predict their happiness a few years after achieving tenure or

not, most believed a favorable outcome was important for their future happiness: “Losing my job would crush my life’s ambitions. It would be terrible.” Yet when surveyed several years after the event, those denied tenure were about as happy as those who received it. Impact bias is important, say Wilson and Gilbert (2005), because people’s “affective forecasts”—their predictions of their future emotions—influence their decisions. If people overestimate the intensity and the duration of the pleasure they will gain from purchasing a new car or undergoing cosmetic surgery, then they may make ill-advised investments in that new Mercedes or extreme makeover.

Let’s make this personal. Gilbert and Wilson invite us to imagine how we might feel a year after losing our nondominant hands. Compared with today, how happy would you be?

Thinking about that, you perhaps 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 so 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 psychological immune system, which includes their strategies for rationalizing, discounting, forgiving, and limiting emotional trauma. Being largely ignorant of our psychological immune system (a phenomenon Gilbert and Wilson call *immune neglect*), we adapt to disabilities, romantic breakups, exam failures, tenure denials, and personal and team defeats more readily than we would expect. Ironically, as Gilbert and his 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.

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. For example, we experience the results of our

mind's unconscious workings when we set a mental clock to record the passage of time or to awaken us at an appointed hour, or when we somehow achieve a spontaneous creative insight after a problem has unconsciously "incubated." Similarly, 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: The mental processes that *control* our social behavior are distinct from the mental processes through which we *explain* our behavior. Our rational explanations may therefore omit the unconscious attitudes that actually guide our behavior. In nine experiments, Wilson and his 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 the 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 first listed all the *reasons* they could think of 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 actually 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 his colleagues (2000). Our unconscious, automatic, *implicit* attitudes regarding someone or something often differ from our consciously controlled, *explicit* attitudes (Gawronski & Bodenhausen, 2006; Nosek, 2007). From childhood, for example, we may retain a habitual, automatic fear or dislike of people for whom we now consciously verbalize respect and appreciation. 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.

Murray Millar and Abraham Tesser (1992) have argued that Wilson overstates our ignorance of self. Their research suggests that, yes, drawing people's attention to *reasons* diminishes the usefulness of attitude reports in predicting behaviors that are driven by *feelings*. They argue that if, instead of having people analyze their romantic relationships, Wilson had first asked them to get more in touch with their feelings ("How do you feel when you are with and apart from your partner?"), the attitude reports might have been more insightful. Other decisions people make—say, choosing which school to attend based on considerations of cost, career advancement, and so forth—seem more cognitively driven. For these, an analysis of reasons rather than feelings may be most



useful. Although the heart has its reasons, sometimes the mind's own reasons are decisive.

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. The sincerity with which people report and interpret their experiences is no guarantee of the validity of those reports. 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 be less gullible.

## CONCEPTS TO REMEMBER

**self-concept** A person's answers to the question, "Who am I?"

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

**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 groups (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 attitudes** 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.



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MODULE

4



# Self-Serving Bias

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. (A low-self-esteem person responds to statements such as “I have good ideas” with a qualifying adjective, such as “somewhat” or “sometimes.”) In a study of self-esteem across 53 nations, the average self-esteem score was above the midpoint in every single country (Schmitt & Allik, 2005). One of social psychology’s most provocative yet firmly established conclusions concerns the potency of **self-serving bias**.



## 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 & others, 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 in words such as these: “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”; “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 (Imai, 1994; Rice, 1985). (Workers are more likely to blame something external—inadequate supplies, excessive workload, difficult co-workers, ambiguous assignments.) Small wonder, too, that people evaluate pay raises as fairer when they receive a bigger raise than most of their co-workers (Diekmann & others, 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 & others, 2003). We will, however, acknowledge our distant past failings—those by our "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 & others, 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). We tend to 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. For 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. (See "Focus On: Self-Serving Bias—How Do I Love Me? Let Me Count the Ways.")

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). One of Freud’s favorite jokes was the husband who told his wife, “If one of us should die, I think I would go live in Paris.”

Michael Ross and Fiore Sicoly (1979) observed a marital version of self-serving bias. They found that young married Canadians usually believed they took more responsibility for such activities as cleaning the house and caring for the children than their spouses credited them for. In a more recent study of 265 U.S. married couples with children, husbands estimated they did 42 percent of the housework. The wives estimated their husbands did 33 percent. When researchers tracked actual housework (by sampling participants’ activity at random times using beepers), they found husbands actually carrying 39 percent of the domestic workload (Lee & Waite, 2005). The general rule: Group members’ estimates of how much they contribute to a joint task typically sum to more than 100 percent (Savitsky & others, 2005).



Activity  
4.2

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

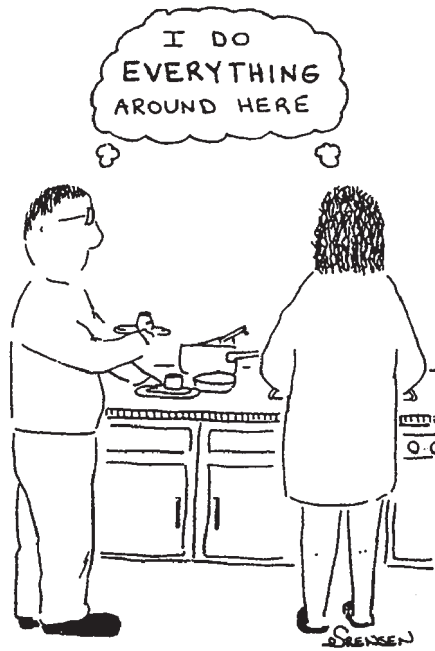
“The one thing that unites all human beings, regardless of age, gender, religion, economic status or ethnic background,” notes columnist Dave Barry (1998), “is that deep down inside, we all believe that we are above average drivers.” We also believe we are above average on most any other subjective and desirable trait. Among the many faces of self-serving bias are these:

- *Ethics.* Most business people see themselves as more ethical than the average business person (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, 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 rated 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; Wylie, 1979). When someone outperforms them, people tend to think of the other as a genius (Lassiter & Munhall, 2001).
- *Tolerance*. In a 1997 Gallup poll, only 14 percent of White Americans rated their prejudice against Blacks as 5 or higher on a 0 to 10 scale. Yet Whites perceived high prejudice (5 or above) among 44 percent of *other* Whites.
- *Parental support*. Most adults believe they support their aging parents more than do their siblings (Lerner & others, 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 about 10 years (Larwood, 1978; C. R. Snyder, 1978).
- *Insight*. Others' public words and deeds reveal their natures, we presume. Our *private* thoughts do the same. Thus, most of us believe we know and understand others better than they know and understand us. We also believe we know ourselves better than others know themselves (Pronin & others, 2001).
- *Attractiveness*. Is it your experience, as it is mine, 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.

My wife and I used to pitch our laundry at the foot of 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."

But what if you had to estimate how often you performed rare household chores, like cleaning the oven? Here, you're likely to say that you do



this less than 50 percent of the time (Kruger & Savitsky, 2009). Apparently this occurs because we have more knowledge about our behavior than about someone else's, and we assume that other people's behavior will be less extreme than ours (Kruger & others, 2008; Moore & Small, 2007). If you can remember cleaning an oven only a few times, you might assume you are unusual and that your partner must do this more often.

Subjective qualities give us leeway in constructing our own definitions of success (Dunning & others, 1989, 1991). Rating my "athletic ability," I ponder my basketball play, not the agonizing weeks I spent as a Little League baseball player hiding in right field. 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, each of us can 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!

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 Elanor 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). Indeed, many of us have what researcher Neil Weinstein (1980, 1982) terms “an unrealistic optimism about future life events.” Partly because of their relative pessimism about others’ fates (Hoorens & others, 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.

Parents extend their unrealistic optimism to their children, assuming their child is less likely to drop out of college, become depressed, or get lung cancer than the average child, but more likely to complete college, remain healthy, and stay happy (Lench & others, 2006).

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 perceive 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 & others, 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).

Unrealistically optimistic people are also more likely to select credit card offers with low annual fees but high interest rates—a poor choice for the average borrower whose interest charges far exceed the difference of a few dollars in the annual fee (Yang & others, 2007). Because the main source of profit for credit card issuers is interest charges, unrealistic optimism means more profit for them—and more money out of the pockets of those surrounded by a rosy glow.

Those who cheerfully run up credit card debt, deny the effects of smoking, and stumble into ill-fated relationships remind us that blind optimism, like pride, may go before a fall. When gambling, optimists persist longer than pessimists, even when piling up losses (Gibson & Sanbonmatsu, 2004). If those who deal in the stock market or in real estate perceive their business intuition as superior to that of their competitors, they, too, may be in for disappointment. 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).

Unrealistic optimism appears to be on the rise. In the 1970s, half of American high school seniors predicted that they would be “very good” workers as adults—the highest rating available, and thus the equivalent of giving themselves five stars out of five. By 2006, two-thirds of teens believed they would achieve this stellar outcome—placing themselves in the top 20 percent (Twenge & Campbell, 2008)! Even more striking, half of high school seniors in 2000 believed that they would earn a graduate degree—even though only 9 percent were likely to actually do so (Reynolds & others, 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).

Optimism definitely beats pessimism in promoting self-efficacy, health, and well-being (Armor & Taylor, 1996; Segerstrom, 2001). Being 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). If our optimistic 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 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) can benefit from having 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 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, best not to look like a bragging fool.

It’s also important to be able 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 the extent to which others think and act as we do. On matters of *opinion*, we find support for our positions by overestimating the extent to which others agree—a phenomenon called the **false consensus effect** (Krueger & Clement, 1994; Marks & Miller, 1987; Mullen & Goethals, 1990). 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 & others, 1998). They guess that others think and act as they do: “I lie, but doesn’t everyone?” If we cheat on our income taxes or smoke, we are likely to overestimate the number of other people who do likewise. If we feel sexual desire toward another, we may overestimate the other’s reciprocal desire. As former *Baywatch* actor David Hasselhoff said, “I have had Botox. Everyone has!” Four recent studies illustrate:

- People who sneak a shower during a shower ban believe (more than nonbathers) that lots of others are doing the same (Monin & Norton, 2003).
- Those thirsty after hard exercise imagine that lost hikers would become more bothered by thirst than by hunger. That’s what 88 percent of thirsty postexercisers guessed in a study by Leaf Van Boven and George Lowenstein (2003), compared with 57 percent of people who were about to exercise.
- As people’s own lives change, they see the world changing. Protective new parents come to see the world as a more dangerous place. People who go on a diet judge food ads to be more prevalent (Eibach & others, 2003).
- People who harbor negative ideas about another racial group presume that many others also have negative stereotypes (Krueger, 1996, 2007). Thus, our perceptions of others’ stereotypes may reveal something of our own.

“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? Most people are in the majority; so when people

Self-serving bias	Example
Attributing one's success to ability and effort, one's failure to luck and things external	I got the A in history because I studied hard. I got the D in sociology because the exams were unfair.
Comparing oneself favorably with others	I'm better to my parents than is my sister.
Unrealistic optimism	Even though 50% of marriages fail, I know mine will be enduring joy.
False consensus	I know most people agree with me that global warming threatens our future.

**FIGURE 4-1**  
How self-serving bias works.

assume they are in the majority they are usually right. 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.

On matters of *ability* or when we behave well or successfully, however, a **false uniqueness effect** more often occurs (Goethals & others, 1991). We serve our self-image by seeing our talents and moral behaviors as relatively unusual. For example, those who use marijuana but use seat belts will *overestimate* (false consensus) the number of other marijuana users and *underestimate* (false uniqueness) the number of other seat belt users (Suls & others, 1988). Thus, we may see our failings as relatively normal and our virtues as relatively exceptional.

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? One explanation sees the self-serving bias as a by-product of how we process and remember information about ourselves. Comparing ourselves with others requires us to notice, assess, and recall their behavior and ours. Thus, there are multiple opportunities for flaws in our information processing (Chambers & Windschitl, 2004). Recall the study in which married people

gave themselves credit for doing more housework than their spouses did. Might that not be due, as Michael Ross and Fiore Sicoly (1979) believed, to our greater recall for what we've actively done and our lesser recall for what we've not done or merely observed our partner doing? I 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 the 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 & others, 1990; Swann, 1996, 1997). Questing for self-affirmation, we're especially motivated to *enhance our self-image* (Sedikides, 1993). Self-esteem motivation, then, helps power our self-serving bias. As social psychologist Daniel Batson (2006) surmises, "The head is an extension of the heart."

Abraham Tesser (1988) reported that a "self-esteem maintenance" motive predicts a variety of interesting findings, even friction among brothers and sisters. Do you have a sibling of the same gender who is close to you in age? If so, people probably compared the two of you as you grew up. Tesser presumes that people's perceiving one of you as more capable than the other will motivate the less able one to act in ways that maintain self-esteem. (Tesser thinks the threat to self-esteem is greatest for an older child with a highly capable younger sibling.) Men with a brother with markedly different ability levels typically recall not getting along well with him; men with a similarly able brother are more likely to recall very little friction.

Self-esteem threats occur among friends, whose success can be more threatening than that of strangers (Zuckerman & Jost, 2001). And they can occur among married partners, too. Although shared interests are healthy, *identical* career goals may produce tension or jealousy (Clark & Bennett, 1992). When a partner outperforms us in a domain important to both our identities, we may reduce the threat by affirming our relationship, saying, "My capable partner, with whom I'm very close, is part of who I am" (Lockwood & others, 2004).

What underlies the motive to maintain or enhance self-esteem? Mark Leary (1998, 2004b, 2007) believes that our self-esteem feelings are like a fuel gauge. Relationships enable surviving and thriving. Thus, 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 our self-esteem and makes us to us more eager for approval. Spurned or jilted, we feel unattractive or inadequate. Like a blinking dashboard light, this pain can motivate action—self-improvement and a search for acceptance and inclusion elsewhere.

## REFLECTIONS ON SELF-ESTEEM AND SELF-SERVING BIAS

If you are like some readers, by now you are finding the self-serving bias either depressing or contrary to your own occasional feelings of inadequacy. Even the people who exhibit the self-serving bias may feel inferior to specific individuals, especially those who are a step or two higher on the ladder of success, attractiveness, or skill. Moreover, not everyone operates with a self-serving bias. Some people *do* suffer from low self-esteem. Positive self-esteem does have some benefits.

### *The Self-Serving Bias as Adaptive*

Self-esteem has its dark side, but also its bright side. When good things happen, people with high self-esteem are more likely to savor and sustain the good feelings (Wood & others, 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 her co-researchers (2003).

Self-serving bias and its accompanying excuses also help protect people from depression (Snyder & Higgins, 1988; Taylor & others, 2003). Nondepressed people usually exhibit self-serving bias. They excuse their failures on laboratory tasks or perceive themselves as being more in control than they are. Depressed people’s self-appraisals and their appraisals of how others really view them are not inflated.

Self-serving bias additionally helps buffer stress. George Bonanno and colleagues (2005) assessed the emotional resiliency of workers who escaped from the World Trade Center or its environs on September 11, 2001. They found that those who displayed self-enhancing tendencies were the most resilient.

In their *terror management theory*, Jeff Greenberg, Sheldon Solomon, and Tom Pyszczynski (1997; Greenberg, 2008) propose another reason why positive self-esteem is adaptive: It buffers anxiety, including anxiety related to our certain death. In childhood we learn that when we meet the standards taught us by our parents, we are loved and protected; when we don’t, love and protection may be withdrawn. We therefore come to associate viewing ourselves as good with feeling secure. Greenberg and colleagues argue that positive self-esteem—viewing oneself as good and secure—even protects us from feeling terror over our eventual death. Their research shows that reminding people of their mortality (say, by writing a short essay on dying) motivates them to affirm their self-worth. When facing such threats, self-esteem buffers anxiety. In 2004, a year after the U.S. invasion, Iraqi

teens who felt their country was under threat reported the highest self-esteem (Carlton-Ford & others, 2008).

As research on depression and anxiety suggests, there is practical wisdom in self-serving perceptions. It may be strategic to believe we are smarter, stronger, and more socially successful than we are. Cheaters may give a more convincing display of honesty if they believe themselves honorable. 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).

### *The Self-Serving Bias as Maladaptive*

Although self-serving pride may help protect us from depression, it can also be maladaptive. People who blame others for their social difficulties are often unhappier than people who can acknowledge their mistakes (C. A. Anderson & others, 1983; Newman & Langer, 1981; Peterson & others, 1981).

Research by Barry Schlenker (1976; Schlenker & Miller, 1977a, 1977b) has also shown how self-serving perceptions can poison a group. As a rock band guitarist during his college days, Schlenker noted that “rock band members typically overestimated their contributions to a group’s success and underestimated their contributions to failure. I saw many good bands disintegrate from the problems caused by these self-glorifying tendencies.” In his later life as a University of Florida social psychologist, Schlenker explored group members’ self-serving perceptions. In nine experiments, he had people work together on some task. He then falsely informed them that their group had done either well or poorly. In every one of those studies, the members of successful groups claimed more responsibility for their group’s performance than did members of groups that supposedly failed at the task.

If most group members believe they are underpaid and underappreciated relative to their better-than-average contributions, disharmony and envy are likely. College presidents and academic deans will readily recognize the phenomenon. Ninety percent or more of college faculty members have rated themselves as superior to their average colleague (Blackburn & others, 1980; Cross, 1977). It is therefore inevitable that when merit salary raises are announced and half receive an average raise or less, many will feel themselves victims of injustice.

Self-serving biases also inflate people’s judgments of their groups. When groups are comparable, most people consider their own group superior (Codol, 1976; Jourden & Heath, 1996; Taylor & Doria, 1981).

- Most university sorority members perceive those in their sorority as far less likely to be conceited and snobbish than those in other sororities (Biernat & others, 1996).

- Fifty-three percent of Dutch adults rate their marriage or partnership as better than that of most others; only 1 percent rate it as worse than most (Buunk & van der Eijnden, 1997).
- Sixty-six percent of Americans give their oldest child's public school a grade of A or B. But nearly as many—64 percent—give the nation's public schools a grade of C or D (Whitman, 1996).
- Most entrepreneurs overpredict their own firms' productivity and growth (Kidd & Morgan, 1969; Larwood & Whittaker, 1977).

That people see themselves and their groups with a favorable bias is hardly new. The tragic flaw portrayed in ancient Greek drama was *hubris*, or pride. Like the subjects of our experiments, the Greek tragic figures were not self-consciously evil; they merely thought too highly of themselves. In literature, the pitfalls of pride are portrayed again and again. In theology, pride has long been first among the "seven deadly sins."

If pride is akin to the self-serving bias, then what is humility? Is it self-contempt? Humility is not handsome people believing they are ugly and smart people trying to believe they are slow-witted. False modesty can actually be a cover for pride in one's better-than-average humility. (James Friedrich [1996] reports that most students congratulate themselves on being better than average at not thinking themselves better than average!) True humility is more like self-forgetfulness than false modesty. It leaves us free to rejoice in our special talents and, with the same honesty, to recognize the talents of others.

## 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.

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MODULE

5



# *The Power of Positive Thinking*

**W**e 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. Indeed, there is an important complement to these truths. High self-esteem—a sense of self-worth—is adaptive. Compared to those with low self-esteem, people with high self-esteem are happier, less neurotic, less troubled by ulcers and insomnia, and less prone to drug and alcohol addictions (Brockner & Hulton, 1978; Brown, 1991). Many clinical psychologists report that underneath much human despair is an impoverished self-acceptance.

Albert Bandura (1986) merges much of this research into a concept called **self-efficacy**, a scholarly version of the wisdom behind the power of positive thinking. An optimistic belief in our own competence and effectiveness pays dividends (Bandura & others, 1999; Maddux and 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.



Your self-efficacy is how competent you feel to do something. If you believe you can do something, will this belief necessarily make a difference? That depends on a second factor: Do you have *control* over your outcomes? You may, for example, feel like an effective driver (high self-efficacy), yet feel endangered by drunken drivers (low control). You may feel like a competent student or worker but, fearing discrimination based on your age, gender, or appearance, you may think your prospects are dim.

## LOCUS OF CONTROL

“I have no social life,” complained a 40-something single man to student therapist Jerry Phares. At Phares’s urging, the patient went to a dance, where several women danced with him. “I was just lucky,” he later reported. “It would never happen again.” When Phares reported this to his mentor, Julian Rotter, it crystallized an idea he had been forming. In Rotter’s experiments and in his clinical practice, some people seemed to persistently “feel that what happens to them is governed by external forces of one kind or another, while others feel that what happens to them is governed largely by their own efforts and skills” (quoted by Hunt, 1993, p. 334).

What do you think about your own life? Are you more often in charge of your destiny, or a victim of circumstance? Rotter called this dimension **locus of control**. With Phares, he developed 29 paired statements to measure a person’s locus of control. Imagine taking this test. Which statements do you more strongly believe?

- |  |    |  |
|--|----|--|
| a. In the long run, people get the respect they deserve in this world. | or | b. Unfortunately, people’s worth passes unrecognized no matter how hard they try.                      |
| a. What happens to me is my own doing.                                 | or | b. Sometimes I feel that I don’t have enough control over the direction my life is taking.             |
| a. The average person can have an influence in government decisions.   | or | b. This world is run by the few people in power, and there is not much the little guy can do about it. |

If your answers to these questions (from Rotter, 1973) were mostly “a,” you probably believe you control your own destiny (*internal* locus of control). If your answers were mostly “b,” you probably feel chance or outside forces determine your fate (*external* locus of control). Those who see themselves as *internally* controlled are more likely to do well in school, successfully stop smoking, wear seat belts, deal with marital

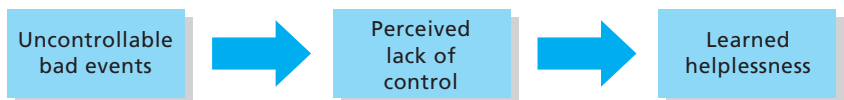
problems directly, earn a substantial income, and delay instant gratification to achieve long-term goals (Findley & Cooper, 1983; Lefcourt, 1982; Miller & others, 1986).

## L EARNED HELPLESSNESS VERSUS SELF-DETERMINATION

The benefits of feelings of control also appear in animal research. Dogs confined in a cage and taught that they cannot escape shocks will learn a sense of helplessness. Later, these dogs cower passively in other situations when they *could* escape punishment. Dogs that learn personal control (by successfully escaping their first shocks) adapt easily to a new situation. Researcher Martin Seligman (1975, 1991) noted similarities to this **learned helplessness** in human situations. Depressed or oppressed people, for example, become passive because they believe their efforts have no effect. Helpless dogs and depressed people both suffer paralysis of the will, passive resignation, even motionless apathy (Figure 5-1).

On the other hand, people benefit by training their self-control “muscles.” That’s the conclusion of studies by Megan Oaten and Ken Cheng (2006) at Sydney’s Macquarie University. For example, students who were engaged in practicing self-control by daily exercise, regular study, and time management became more capable of self-control in other settings, both in the laboratory and when taking exams. If you develop your self-discipline in one area of your life, it may spill over into other areas as well.

Ellen Langer and Judith Rodin (1976) tested the importance of personal control by treating elderly patients in a highly rated Connecticut nursing home in one of two ways. With one group, the benevolent caregivers emphasized “our responsibility to make this a home you can be proud of and happy in.” They gave the patients their normal well-intentioned, sympathetic care and allowed them to assume a passive care-receiving role. Three weeks later, most of these patients were rated by themselves, by interviewers, and by nurses as further debilitated. Langer and Rodin’s other treatment promoted personal control. It emphasized opportunities for choice, the possibilities for influencing nursing-home policy, and the person’s responsibility “to make of your life whatever you want.” These patients



**FIGURE 5-1**

**Learned helplessness.** When animals and people experience uncontrollable bad events, they learn to feel helpless and resigned.

were given small decisions to make and responsibilities to fulfill. Over the ensuing three weeks, 93 percent of this group showed improved alertness, activity, and happiness.

Studies confirm that systems of governing or managing people that promote personal control will indeed promote health and happiness (Deci & Ryan, 1987). Here are some additional examples:

- Prisoners given some control over their environments—by being able to move chairs, control TV sets, and operate the lights—experience less stress, exhibit fewer health problems, and commit less vandalism (Ruback & others, 1986; Wener & others, 1987).
- Workers given leeway in carrying out tasks and making decisions experience improved morale (Miller & Monge, 1986). So do telecommuting workers who have more flexibility in balancing their work and personal life (Valcour, 2007).
- Institutionalized residents allowed choice in matters such as what to eat for breakfast, when to go to a movie, and whether to sleep late or get up early, may live longer and certainly are happier (Timko & Moos, 1989).
- Homeless shelter residents who perceive little choice in when to eat and sleep, and little control over their privacy, are more likely to have a passive, helpless attitude regarding finding housing and work (Burn, 1992).
- In all countries studied, people who perceive themselves as having free choice experience greater satisfaction with their lives. And countries where people experience more freedom have more satisfied citizens (Inglehart & others, 2008).

### *The Costs of Excess Choice*

Can there ever be too much of a good thing such as freedom and self-determination? Barry Schwartz (2000, 2004) contends that individualistic modern cultures indeed have “an excess of freedom,” causing decreased life satisfaction and increased rates of clinical depression. Too many choices can lead to paralysis, or what Schwartz calls “the tyranny of freedom.” After choosing from among 30 kinds of jams or chocolates, people express less satisfaction with their choices than those choosing from among 6 options (Iyengar & Lepper, 2000). Making choices is also tiring. Students who chose which classes they would take during the upcoming semester—versus those who simply read over the course catalog—were later less likely to study for an important test and more likely to procrastinate by playing video games and reading magazines. In another study, students who chose among an array of consumer products were later less able to consume an unsavory but healthy drink (Vohs & others, 2008). So

after choosing among the 19,000 possible beverage combinations at Starbucks or the 40,000 items at the average supermarket, you might be less satisfied with your choices and more likely to go home and eat the ice cream straight from the container.

Christopher Hsee and Reid Hastie (2006) illustrate how choice may enhance regret. Give employees a free trip to either Paris or Hawaii and they will be happy. But give them a choice between the two and they may be less happy. People who choose Paris may regret that it lacks warmth and the ocean. Those who choose Hawaii may regret the lack of great museums. Something like that may explain why the seniors from 11 colleges in one recent study who spent the most time seeking and assessing various job possibilities ended up with higher starting salaries but lower satisfaction (Iyengar & others, 2006).

In other experiments, people have expressed greater satisfaction with irrevocable choices (such as those made in an “all purchases final” sale) than with reversible choices (as when allowing refunds or exchanges). Ironically, people like and will pay for the freedom to reverse their choices. Yet, note Daniel Gilbert and Jane Ebert (2002), that same freedom “can inhibit the psychological processes that manufacture satisfaction.”

That principle may help explain a curious social phenomenon (Myers, 2000a): National surveys show that people expressed more satisfaction with their marriages several decades ago when marriage was more irrevocable (“all purchases final”). Today, despite greater freedom to escape bad marriages and try new ones, people tend to express somewhat less satisfaction with the marriage that they have.

## REFLECTIONS ON SELF-EFFICACY

### *The Power of Positive Thinking*

Although psychological research on perceived self-control is relatively new, the emphasis on taking charge of one’s life and realizing one’s potential is not. The you-can-do-it theme of rags-to-riches books is an enduring idea. We find it in Norman Vincent Peale’s 1950s bestseller, *The Power of Positive Thinking*: “If you think in positive terms you will get positive results. That is the simple fact.” We find it in the many self-help books and videos that urge people to succeed through positive mental attitudes. “What you focus on with your thought and feeling is what you attract into your experience,” offers Rhonda Byrne in the 2006 bestseller, *The Secret*. “You will attract everything you require—money, people, connections.”

Research on self-control gives us greater confidence in traditional virtues such as perseverance and hope. Bandura (2004) acknowledges that self-efficacy is fed by social persuasion (“you have what it takes



"This gives my confidence a real boost."

Confidence and feelings of self-efficacy grow from successes. © The New Yorker Collection, 1983, Edward Koren, from cartoonbank.com. All rights reserved.

to succeed") and by self-persuasion ("I think I can, I think I can"). Modeling—seeing similar others succeed with effort—helps, too. But the biggest source of self-efficacy, he says, is *mastery experiences*. "Successes build a robust belief in one's efficacy." If your initial efforts to lose weight, stop smoking, or improve your grades succeed, your self-efficacy increases. After mastering the physical skills needed to repel a sexual assault, women feel less vulnerable, less anxious, and more in control (Ozer & Bandura, 1990). After experiencing academic success, students believe they are better at school, which often stimulate them to work harder and achieve more (Felson, 1984; Marsh & Young, 1997). To do one's best and achieve is to feel more confident and empowered.

A team of researchers led by Roy Baumeister (2003) concurs. "Praising all the children just for being themselves," they contend, "simply devalues praise." Better to praise and bolster self-esteem "in recognition of good performance. . . . As the person performs or behaves better, self-esteem is encouraged to rise, and the net effect will be to reinforce both good behavior and improvement. Those outcomes are conducive to both the happiness of the individual and the betterment of society."

So there is a power to positive thinking. But let us remember the point at which we began our consideration of self-efficacy: Any truth,

separated from its complementary truth, is a half-truth. The truth embodied in the concept of self-efficacy can encourage us not to resign ourselves to bad situations, to persist despite initial failures, to exert effort without being overly distracted by self-doubts. But lest the pendulum swing too far toward *this* truth, we had best remember that it, too, is not the whole story. If positive thinking can accomplish *anything*, then if we are unhappily married, poor, or depressed, we have only ourselves to blame. For shame! If only we had tried harder, been more disciplined, less stupid. Failing to appreciate that difficulties sometimes reflect the oppressive power of social situations can tempt us to blame people for their problems and failures, or even to blame ourselves too harshly for our own. Ironically, life's greatest disappointments, as well as its highest achievements, are born of the highest expectations. The bigger we dream, the more we might attain—and the more we risk falling short.

### *The “Dark Side” of Self-Esteem*

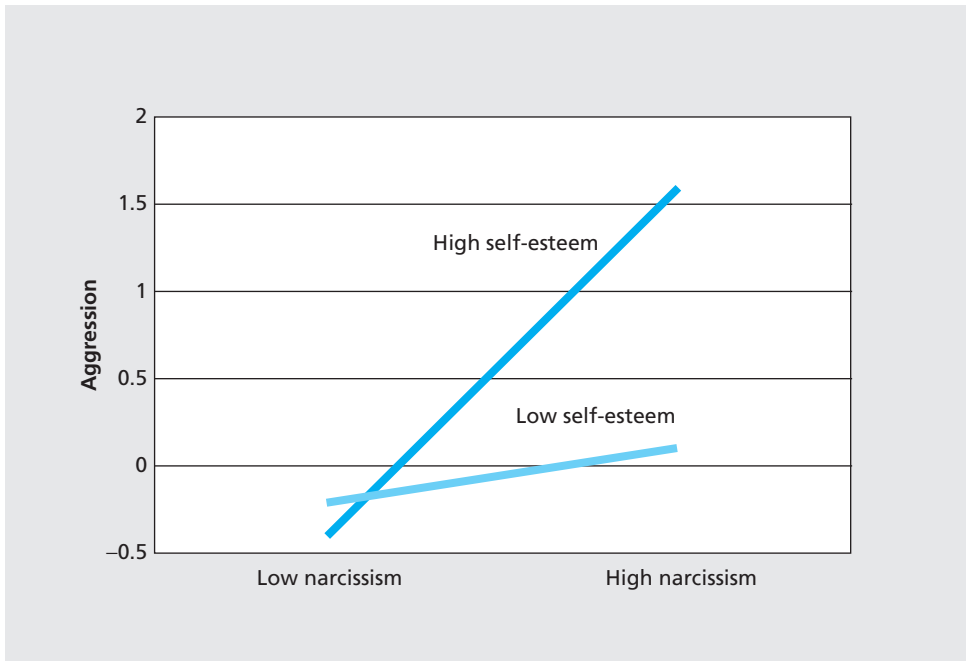
People with low self-esteem often have problems in life—they make less money, sometimes abuse drugs, and are more likely to be depressed (Salmela-Afo & Nurmi, 2007; Trzesniewski & others, 2006). However, a correlation between two variables is sometimes caused by a third factor. Maybe people low in self-esteem 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 & others, 2008). In other words, low self-esteem was not the cause of these young adults' problems—the seeming cause, instead, was that many could not escape their tough childhoods.

High self-esteem does have some benefits—it fosters initiative, resilience, and pleasant feelings (Baumeister & others, 2003). Yet teen males who engage in sexual activity at an “inappropriately young age” tend to have *higher* than average self-esteem. So do teen gang leaders, extreme ethnocentrists, terrorists, and men in prison for committing violent crimes (Bushman & Baumeister, 2002; Dawes, 1994, 1998). “Hitler had very high self-esteem,” note Baumeister and his co-authors (2003).

### *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. Most people with high self-esteem value both individual achievement and relationships with others. Narcissists usually have high self-esteem, but they are missing the piece about caring for others (Campbell & others, 2002). Although narcissists are often outgoing and charming early on, their self-centeredness often leads to relationship problems in the long run (Campbell, 2005).





**FIGURE 5-2**

**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.

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 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 & others, 2009; Figure 5-2). Narcissists can be charming and entertaining. But as one wit has said, “God help you if you cross them.”

“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, self-effacing folks with low self-esteem). “My conclusion is that self-control is worth 10 times as much as self-esteem.”

What about the idea that an overinflated ego is just a cover for deep-seated insecurity? Do narcissistic people actually 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 like good, wonderful, great, and right, and words like 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 & others, 2007). And narcissists were even faster to identify with words like 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*.

After tracking self-importance across the last several decades, psychologist Jean Twenge (2006; Twenge & others, 2008) reports that today’s young generation—*Generation Me*, she calls it—express more narcissism (by agreeing with statements such as “If I ruled the world, it would be a better place” or “I think I am a special person”). Agreement with narcissistic items correlates with materialism, 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.

### **Low Versus Secure Self-Esteem**

The findings linking a highly positive self-concept with negative behavior exist in tension with the findings that people expressing low self-esteem are more vulnerable to assorted clinical problems, including anxiety, loneliness, and eating disorders. When feeling bad or threatened, low-self-esteem people often take a negative view of everything. They notice and remember others’ worst behaviors and think their partners don’t love them (Murray & others, 1998, 2002; Ybarra, 1999).

Secure self-esteem—one rooted more in feeling good about who one is than in grades, looks, money, or others’ approval—is conducive to long-term well-being (Kernis, 2003; Schimel & others, 2001). Jennifer Crocker and her colleagues (2002, 2003, 2004, 2005) confirmed this in studies with University of Michigan students. Those whose self-worth



was most fragile—most contingent on external sources—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.

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 for quality of life. Moreover, if feeling good about ourselves is our goal, then we may become less open to criticism, more likely to blame than 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, relationship, and autonomy, note Crocker and Park. To focus less on one's self-image, and more on developing one's talents and relationships, eventually leads to greater well-being.

## CONCEPTS TO REMEMBER

**locus of control** The extent to which people perceive outcomes as internally controllable by their own efforts or as externally controlled by chance or outside forces.

**learned helplessness** The sense of hopelessness and resignation learned when a human or animal perceives no control over repeated bad events.

## MODULE

# 6

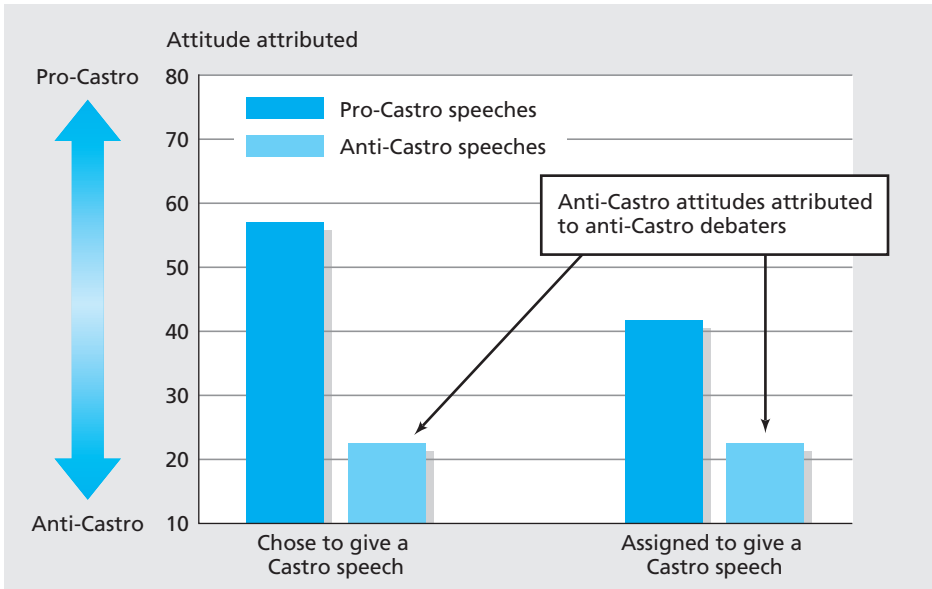
# *The Fundamental Attribution Error*

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 have seen this when teaching the same subject 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.

Researchers have found a common problem with our attributions in explaining people's behavior. 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; that people speed past us on the highway because they're aggressive rather than late for an important meeting.

This discounting of the situation, dubbed by Lee Ross (1977) the **fundamental attribution error**, 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,





**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.

Fidel Castro. When told that the debater whose speech they were reading chose which position to take, the students logically enough assumed it reflected the person's own attitude. But what happened when the students were told that the debate coach had assigned the position? People who are merely feigning a position write more forceful statements than you'd expect (Allison & others, 1993; Miller & others, 1990). Thus, even knowing that the debater had been told to take a pro- or anti-Castro position did not prevent students from inferring that the debater in fact had the 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. Our *own* behavior we often explain 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 & others, 1991; McGuire & McGuire, 1986; White & Younger, 1988). A husband who attributes his wife's criticism to her being "mean and cold" is

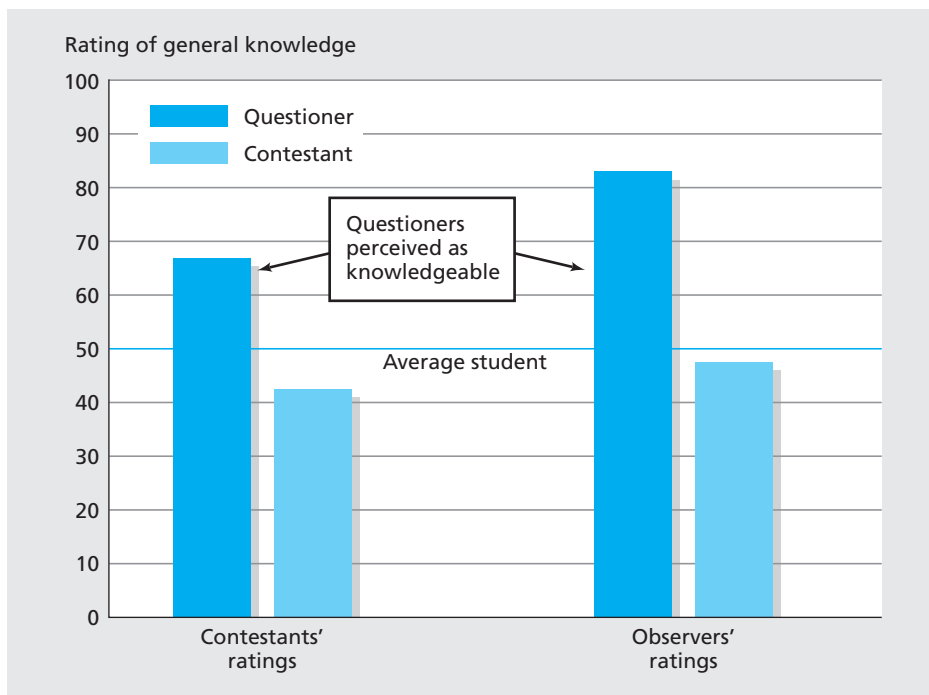
more likely to become violent (Schweinle & others, 2002). When she expresses distress about their relationship, he hears the worst and reacts angrily.

## 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 motives (Fein & others, 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. Perhaps this is why Leonard Nimoy, who played Mr. Spock on the original *Star Trek*, entitled his book, *I Am Not Spock*.

The discounting of social constraints was evident in a thought-provoking experiment by Lee Ross and his collaborators (Ross & others, 1977). The experiment re-created 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 the experiment, with Teresa Amabile and Julia Steinmetz, 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 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?”



**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, Amabile, & Steinmetz, 1977.

If even those few questions have you feeling a little uninformed, then you will appreciate the results of this experiment.\*

Everyone had to know that the questioner 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, intelligent and socially competent people are *more* likely to make the attribution error (Block & Funder, 1986).

In real life, those with social power usually initiate and control conversations, which often leads underlings to overestimate their

\* 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 lots of harbors and inlets, a geographical fact that contributed to its role in the history of maritime trade.)

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 usually amazed to discover that teachers are not so brilliant after all.

To illustrate the fundamental attribution error, most of us need look no further than our own experiences. Determined to make some new friends, Bev 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. Bev 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 Bev 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*

#### *Differing Perspectives*

Attribution theorists 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.

From his analysis of 173 studies, Bertram Malle (2006) concluded that in many situations there is little difference in how actors and observers explain behavior. The difference comes 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’re more likely to attribute our behavior to the situation, while someone observing us may spontaneously infer a trait.

In some experiments, people have viewed a videotape of a suspect confessing during a police interview. If they viewed the confession through a camera focused on the suspect, they perceived the confession as genuine. If they viewed it through a camera focused on the detective, they perceived it as more coerced (Lassiter & others, 1986, 2005, 2007). The camera perspective influenced people’s guilt judgments even when the judge instructed them not to allow this to happen (Lassiter & others, 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 this research, reports Lassiter, New Zealand has made it a national policy that police interrogations be filmed with equal focus on the officer and the suspect, such as by filming them with side profiles of both.

### *Perspectives Change with Time*

As the once-visible person recedes in their memory, observers often give more and more credit to the situation. As we saw above in the groundbreaking attribution error experiment by Edward Jones and Victor Harris (1967), immediately after hearing someone argue an assigned position, people assume that's how the person really felt. Jerry Burger and M. L. Palmer (1991) found that a week later they are much more ready to credit the situational constraints. The day after a presidential election, 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 (the winner from the incumbent party was likable). 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.

Let's make this personal: 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 five years ago—people more often ascribe trait descriptions. When recalling our past, we become like observers of someone else, note researchers Emily Pronin and Lee 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: Would you say your social psychology instructor is a quiet or a talkative person?



Activity  
6.2

My guess is you inferred 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 different 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 conventions and in unfamiliar situations I feel and act rather shy." Because we are acutely aware of how our behavior varies with the situation, we see ourselves as more variable than

other people (Baxter & Goldberg, 1987; Kammer, 1982; Sande & others, 1988). "Nigel is uptight, Fiona is relaxed. With me it varies."

## Cultural Differences

Cultures also influence attribution error (Ickes, 1980; Watson, 1982). A 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 children grow up in Western culture, they learn to explain behavior in terms of the other's personal characteristics (Rholes & others, 1990; Ross, 1981). As a first-grader, one of my sons brought home an example. He unscrambled the words "gate the sleeve caught Tom on his" into "The gate caught Tom on his sleeve." His teacher, applying the Western cultural assumptions of the curriculum materials, marked that wrong. The "right" answer located the cause within Tom: "Tom caught his sleeve on the gate."

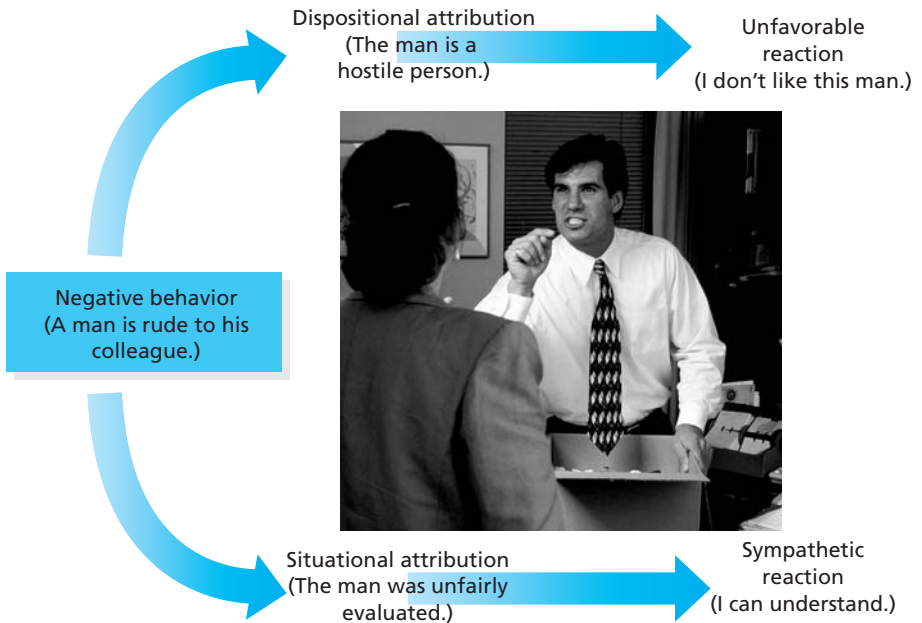
The fundamental attribution error occurs across varied cultures (Krull & others, 1999). Yet people in Eastern Asian cultures are somewhat more sensitive to the importance of situations. Thus, when aware of the social context, they are less inclined to assume that others' behavior corresponds to their traits (Choi & others, 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 collectivist cultures, people less often perceive others in terms of personal dispositions (Lee & others, 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 friendly") 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 & others, 1982; Skitka, 1999; Wagstaff, 1983; Zucker &



**FIGURE 6-3**

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

Weiner, 1993). 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.

Can we benefit from being aware of the attribution error? I 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 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 on others' behavior.

(Also called *correspondence bias*, because we so often see behavior as corresponding to a disposition.)

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MODULE

7



# The Powers and Perils of Intuition

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. 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 follow the example of *Star Wars*’ Luke Skywalker by switching off our computer guidance systems and trusting 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”?

Priming research suggests that the unconscious indeed controls much of our behavior. As John Bargh and Tanya Chartrand (1999) explain, “Most of a person’s everyday life is determined not by their conscious intentions and deliberate choices but by mental processes that are put into motion by features of the environment and that operate outside of conscious awareness and guidance.” When the light turns red, we react and hit the brakes 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 & Ferguson, 2000; Greenwald & Banaji, 1995; Strack & Deutsch, 2004). Our thinking is partly *controlled* (reflective, deliberate, and conscious) and—more than psychologists once supposed—partly *automatic* (impulsive, effortless, and without our awareness). Automatic, intuitive thinking occurs not “on-screen” but off-screen, 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 not only on the word spoken but also 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). Our ancestors who intuitively feared a sound in the bushes were usually fearing nothing. But when the sound was made by a dangerous predator they became more likely to survive to pass their genes down to us than did their more deliberative cousins.
- Given sufficient *expertise*, people may intuitively know the answer to a problem. 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.
- Faced with a decision but lacking the expertise to make an informed snap judgment, our *unconscious thinking* may guide us toward a satisfying choice. That’s what University of Amsterdam psychologist Ap Dijksterhuis and his co-workers (2006a, 2006b) discovered after showing people, for example, a dozen pieces of information about each of four potential apartments. Compared with people who made instant decisions or were given time to analyze the information, the most satisfying

decisions were made by those who were distracted and unable to focus consciously on the problem. Although these findings are controversial (González-Vallejo & others, 2008; Newell & others, 2008), this much seems true: When facing a tough decision it often pays to take our time—even to sleep on it—and to await the intuitive result of our out-of-sight information processing.

Some things—facts, names, and past experiences—we remember explicitly (consciously). But other things—skills and conditioned dispositions—we remember *implicitly*, without consciously knowing or declaring that we know. This is 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 physician, who would need to reintroduce himself with a handshake each day. One day the physician affixed a tack to his hand, causing the patient to jump with pain. When the physician next returned, he was still unrecognized (explicitly). But the patient, retaining an implicit memory, would not 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 correctly 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 big 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. 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). Elizabeth Loftus and Mark Klinger (1992) nevertheless speak for other cognitive scientists in having doubts about the brilliance of intuition. They report “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 commercial subliminal tapes 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 thinking also appears in the vast new literature on 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 some of these efficient thinking patterns, remember this: Demonstrations of how people create counterfeit beliefs do not prove that all beliefs are counterfeit (although, to recognize counterfeiting, 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 intuitions sometimes err. Usually, we are unaware of our flaws. The “intellectual conceit” evident in judgments of past knowledge (“I knew it all along”) extends to estimates of current knowledge and

predictions of future behavior. We know we've messed up in the past. But we have more positive expectations for our future performance in meeting deadlines, managing relationships, following an exercise routine, and so forth (Ross & Newby-Clark, 1998).

To explore this **overconfidence phenomenon**, 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: About 30 percent of the time, the correct answers lay outside the range they felt 98 percent confident about.

To find out whether overconfidence extends to social judgments, David Dunning and his associates (1990) created a little game show. They asked Stanford University students to guess a stranger's answers to a series of questions, such as "Would you prepare for a difficult exam alone or with others?" and "Would you rate your lecture notes as neat or messy?" Knowing the type of question but not the actual questions, the participants first interviewed their target person about background, hobbies, academic interests, aspirations, astrological sign—anything they thought might be helpful. Then, while the targets privately answered 20 of the two-choice questions, the interviewers predicted their target's answers and rated their own confidence in the predictions.

The interviewers guessed right 63 percent of the time, beating chance by 13 percent. But, on average, they *felt* 75 percent sure of their predictions. When guessing their own roommates' responses, they were 68 percent correct and 78 percent confident. Moreover, the most confident people were most likely to be overconfident. People also are markedly overconfident when judging whether someone is telling the truth or when estimating things such as the sexual history of their dating partner or the activity preferences of their roommates (DePaulo & others, 1997; Swann & Gill, 1997).

Ironically, *incompetence feeds overconfidence*. It takes competence to recognize what competence is, note Justin Kruger and David Dunning (1999). Students who score at the bottom on tests of grammar, humor, and logic are most prone to overestimating their gifts at such. 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 Dunning (2005) recreated this phenomenon in experiments, confirming that our ignorance of our ignorance sustains our self-confidence. Follow-up studies indicate that this "ignorance of one's incompetence" occurs mostly on relatively easy-seeming tasks, such as forming words out of "psychology."

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



On really hard tasks, poor performers more often appreciate their lack of skill (Burson & others, 2006).

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." In one study, participants watched someone walk into a room, sit, read a weather report, and walk out (Borke-nau & Liebler, 1993). Based on nothing more than that, their estimate of the person's intelligence correlated with the person's intelligence score about as well as did the person's own self-estimate (.30 vs. .32)! If ignorance can beget false confidence, then—yikes!—where, we may ask, are you and I unknowingly deficient?

Are people better at predicting their own *behavior*? To find out, Robert Vallone and his 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.

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 & others, 1993; Shepperd & others, 2005). Roger Buehler and his colleagues (1994, 2002, 2003, 2005) report that most students also confidently underestimate how long it will take them to complete papers and other major assignments. They are not alone:

- *The "planning fallacy."* How much free time do you have today? How much free time do you expect you will have a month from today? Most of us overestimate how much we'll be getting done, and therefore how much free time we will have (Zauberman & Lynch, 2005). Professional planners, too, routinely underestimate the time and expense of projects. In 1969, Montreal Mayor Jean Drapeau proudly announced that a \$120 million stadium with a retractable roof would be built for the 1976 Olympics. The roof was completed in 1989 and cost \$120 million by itself. In 1985, officials estimated that Boston's "Big Dig" highway project would cost \$2.6 billion and take until 1998. The cost ballooned to \$14.6 billion and the project took until 2006.
- *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



Activity  
7.2

Malkiel (2007) 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 Saddam Hussein who in 1990 marched his army into Kuwait and in 2003 promised to defeat invading armies. It was a confident George W. Bush who proclaimed that peaceful democracy would soon prevail in a liberated and thriving Iraq, with its alleged weapons of mass destruction newly destroyed.

What produces overconfidence? Why doesn't experience lead us to a more realistic self-appraisal? For one thing, people tend to recall their mistaken judgments as times when they were *almost* right. Philip Tetlock (1998, 1999, 2005) observed this after inviting various academic and government experts to project—from their viewpoint in the late 1980s—the future governance of the Soviet Union, South Africa, and Canada. Five years later communism had collapsed, South Africa had become a multiracial democracy, and Canada's French-speaking minority had not seceded. Experts who had felt more than 80 percent confident were right in predicting these turns of events less than 40 percent of the time. Yet, reflecting on their judgments, those who erred believed they were still basically right. I was "almost right," said many. "The hardliners almost succeeded in their coup attempt against Gorbachev." "The Quebecois separatists almost won the secessionist referendum." "But for the coincidence of de Klerk and Mandela, there would have been a much bloodier transition to black majority rule in South Africa." The Iraq war was a good idea, just badly executed, excused many of those who had supported it. Among political experts—and also stock market forecasters, mental health workers, and sports prognosticators—overconfidence is hard to dislodge.

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 twos) 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**.

## 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.

Two 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).

To reduce "planning fallacy" overconfidence, people can be asked to *unpack a task*—to break it down into its subcomponents—and estimate the time required for each. Justin Kruger and Matt Evans (2004) report that doing so leads to more realistic estimates of completion time.

When people think about why an idea *might* be true, it begins to seem true (Koehler, 1991). Thus, another way to reduce overconfidence is to get people to think of one way their judgments *might be wrong*; that is, force them to consider disconfirming information (Koriat & others, 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



Activity  
7.3

Do you agree or disagree with this statement?

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.

About 85 percent of college students said they 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 (though unconsciously) revise our memories to suit our current knowledge. When one of my 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



### Activity 7.4

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, what do you think is the extent of the change?

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. Daryl Bem and Keith McConnell (1970) conducted a survey among Carnegie-Mellon University students. Buried in it was a question concerning student control over the university curriculum. A week later the students 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.

After observing Clark University 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 their 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 three-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 have sojourned in Scotland I now (back in my office facing deadlines and interruptions) romanticize as pure bliss. The mist and the midges are but

dim memories. The spectacular scenery, 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 recall love at first sight. Those who had broken up were more likely to recall having recognized the partner 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 two years later, those whose marriages had soured recalled that things had always been bad. The results are “frightening,” say 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, just that when memories are hazy, current feelings guide our recall. When widows and widowers try to recall the grief they felt on their spouses’ death five years earlier, their current emotional state colors their memories (Safer & others, 2001). When patients recall their previous day’s headache pain, their current feelings sway their recollections (Eich & others, 1985). Parents of every generation bemoan the values of the next generation, partly because they misrecall their youthful values as being closer to their current values. And teens of every generation recall their parents as—depending on their current mood—wonderful or woeful (Bornstein & others, 1991).

## *Reconstructing Our Past Behavior*

Memory construction enables us to revise our own histories. Michael Ross, Cathy McFarland, and Garth Fletcher (1981) exposed some University of Waterloo students to a message convincing them of the desirability of toothbrushing. Later, in a supposedly different experiment, these students recalled brushing their teeth more often during the preceding two weeks than did students who had not heard the message. Likewise, people who are surveyed report smoking many fewer cigarettes than are actually sold (Hall, 1985). And they recall casting more votes than were actually recorded (Census Bureau, 1993).

Social psychologist Anthony Greenwald (1980) noted the similarity of such findings to happenings 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, smoking cessation, and exercise show only modest improvement on average. Yet they often claim considerable benefit (Myers, 2010). 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

**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.

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MODULE

8



# *Reasons for Unreason*

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

Adolph Hitler

**W**hat 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 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.



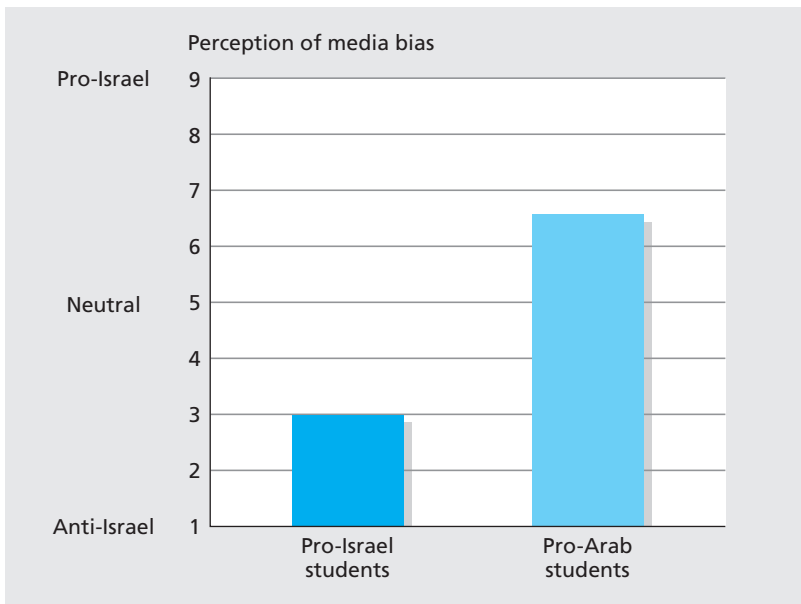
## OUR PRECONCEPTIONS CONTROL OUR INTERPRETATIONS

It is a significant fact about the human mind: Our preconceptions guide how we perceive and interpret information. We interpret the world through belief-tinted glasses. “Sure, preconceptions matter,” people will agree; yet they fail to realize how great the effect is.

An experiment by Robert Vallone, Lee Ross, and Mark Lepper (1985) reveals just how powerful preconceptions can be. They showed pro-Israel and pro-Arab students six network news segments describing the 1982 killing of civilian refugees at two camps in 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 & others, 2008). In the 2008 U.S. presidential race, supporters of Hillary Clinton, Barack Obama, and John McCain all noted instances when the media seemed biased against their candidate, sometimes because of seeming prejudice related to gender, race, or age.

But it’s not just fans and politicians. People everywhere perceive mediators and media as biased against their position. “There is no sub-



**FIGURE 8-1**

Pro-Israel 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, Ross, & Lepper, 1985.

ject 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.

Our assumptions about the world can even make contradictory evidence seem supportive. For example, Ross and Lepper assisted Charles Lord (1979) in asking two groups of students to evaluate the results of two supposedly new research studies. Half the students favored capital punishment and half opposed it. Of the studies they evaluated, one confirmed and the other disconfirmed the students’ beliefs about the deterrent effect of the death penalty. The results: Both proponents and opponents of capital punishment readily accepted evidence that confirmed their belief but were sharply critical of disconfirming evidence. Showing the two sides an *identical* body of mixed evidence had not lessened their disagreement but *increased* it.

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).

Other experiments have manipulated people’s preconceptions—with astonishing effects on their interpretations and recollections. Myron Rothbart and Pamela Birrell (1977) had University of Oregon students assess the facial expression of a man (Figure 8-2). Those told he was a



**FIGURE 8-2**

**Judge for yourself.** Is this person’s expression cruel or kind? If told he was a Nazi, would your reading of his face differ?



Supporters of a particular candidate or cause tend to see the media as favoring the other side.

Gestapo leader responsible for barbaric medical experiments on concentration camp inmates intuitively judged his expression as cruel. (Can you see that barely suppressed sneer?) Those told he was a leader in the anti-Nazi underground movement whose courage saved thousands of Jewish lives judged his facial expression as warm and kind. (Just look at those caring eyes and that almost smiling mouth.)

Filmmakers control people's perceptions of emotion by manipulating the setting in which they see a face. They call this the "Kulechov effect," after a Russian film director who would skillfully guide viewers' inferences by manipulating their assumptions. Kulechov demonstrated the phenomenon by creating three short films that presented identical footage of the face of an actor with a neutral expression after viewers had first been shown one of three different scenes: a dead woman, a dish of soup, or a girl playing. As a result, in the first film the actor seemed sad, in the second thoughtful, and in the third happy.

## WE ARE MORE SWAYED BY MEMORABLE EVENTS THAN BY FACTS

Consider the following: Do more people live in Iraq or in Tanzania? (See page 86.)

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.

But sometimes the rule deludes us. If people hear a list of famous people of one sex (Jennifer Lopez, Venus Williams, Hillary Clinton) intermixed with an equal-size list of unfamous people of the other sex (Donald Scarr, William Wood, Mel Jasper), the famous names will later be more cognitively available. Most people will subsequently recall having heard more (in this instance) women's names (McKelvie, 1995, 1997; Tversky & Kahneman, 1973). Vivid, easy-to-imagine events, such as shark attacks or diseases with easy-to-picture symptoms, may likewise seem more likely to occur than harder-to-picture events (MacLeod & Campbell, 1992; Sherman & others, 1985). Even fictional happenings in novels, television, and movies leave images that later penetrate our judgments (Gerrig & Prentice, 1991; Green & others, 2002; Mar & Oatley, 2008).

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). And 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 powerful anecdotes can nevertheless be more compelling than statistical information and why perceived risk is therefore often badly out of joint with real risks (Allison & others, 1992). We fret over extremely rare child abduction, even if we don't buckle our children in the backseat. We fear terrorism, but are indifferent to global climate change—"Armageddon in slow motion." In short, we worry about remote possibilities while ignoring higher probabilities, a phenomenon that Cass Sunstein (2007b) calls 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 2003 to 2005, U.S. travelers were 230 times more likely to die in a car crash than on a commercial flight covering the same distance (National Safety Council, 2008). In 2006, reports the Flight Safety Foundation, there was one airliner accident for every 4.2 million flights by Western-built commercial jets (Wald, 2008). For most air travelers, the most dangerous part of the journey is the drive to the airport.

Shortly after 9/11, as many people abandoned air travel and took to the roads, I 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). It took a curious German researcher (why didn't I think of this?) to check that prediction against accident data, which confirmed an excess of some 350 deaths in the last three months of 2001 compared with the three-month average in the preceding five 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 that each day claims the equivalent of four 747s filled with children (Parashar & others, 2006). But then again, dramatic events can also serve to awaken us to real risks. That, say some scientists, is what happened when hurricanes Katrina and Rita in 2005 began to raise concern that global warming, by raising sea levels and spawning extreme weather, is destined to become nature's own weapon of mass destruction.

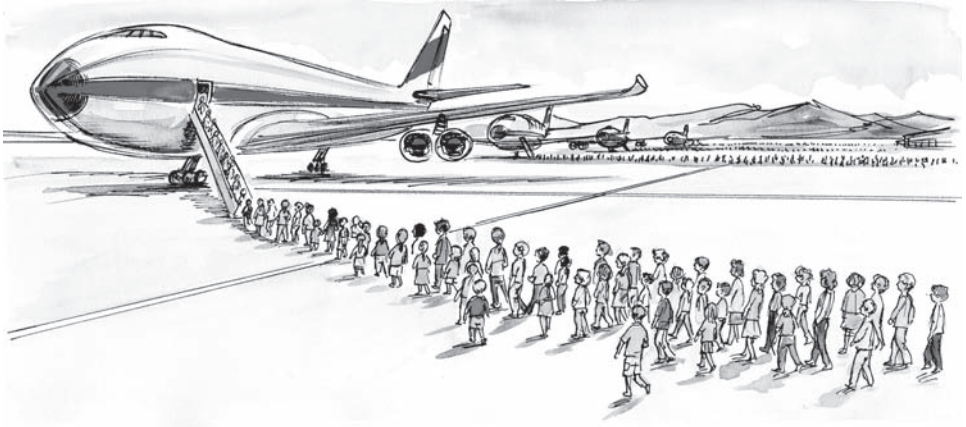
## WE MISPERCEIVE CORRELATION AND CONTROL

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's 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

**Answer to Question on page 85:** *Tanzania's 40 million people greatly outnumber Iraq's 28 million. Most people, having more vivid images of Iraqis, guess wrong.*



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. Illustration by Dave Bohn.

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. That 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 that people easily misperceive random events as confirming their beliefs (Crocker, 1981; Jennings & others, 1982; Troler & 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 the joint occurrence of the premonition and the event's later occurrence. If we believe that overweight women are unhappier, we perceive that we have witnessed such a correlation even when we have not (Viken & others, 2005). We seldom notice or remember 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.

### *Illusion of Control*

Our tendency to perceive random events as related feeds an **illusion of control**—the idea that *chance events are subject to our influence*. This keeps gamblers going and makes the rest of us do all sorts of unlikely things.



### *Gambling*

Ellen Langer (1977) demonstrated the illusion of control with experiments on 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. Being the person who throws the dice or spins the wheel increases people's confidence (Wohl & Enzle, 2002). In these and other ways, more than 50 experiments have consistently found people acting as if they can predict or control chance events (Presson & Benassi, 1996; Thompson & others, 1998).

Observations of real-life gamblers confirm these experimental findings. 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, 2001).

### *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, the lowest-scoring students 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're 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, or after receiving a label such as "gifted" or "learning disabled," or after being tracked with "high-ability" or "average-ability" students. 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 about 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 & others, 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).

Reading the experiments on teacher expectations makes me wonder about the effect of *students'* expectations on 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 in a learning experiment 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 led to expect their male instructor to be sexist had a less positive experience with him, performed worse, and rated him as less competent than did women not given the sexist expectation (Adams & others, 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 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 (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 What We Expect from Others?*

So the expectations of experimenters and teachers, though 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 self-fulfilling prophecies also 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 & others, 2003; Rosenthal, 2003, 2006).

Do self-fulfilling prophecies color our personal relationships? There are times when negative expectations of someone lead us to be extra nice to that person, which induces him or her to be nice in return—thus *dis*-confirming 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 & others, 1996).

In laboratory games, hostility nearly always begets hostility: People who perceive their opponents as noncooperative will readily induce

them to be 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 I expect my wife to be in a bad mood or in a loving mood may affect how I relate to her, thereby inducing her to confirm my 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 her 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 & others, 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 & others, 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**. In a classic study, Snyder, Elizabeth Tanke, and Ellen Berscheid (1977) had male students talk on the telephone with women they thought (from having been shown a picture) were either attractive or unattractive. Analysis of just the women's comments during the conversations revealed that 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.

Expectations influence children's behavior, too. After observing the amount of litter in three classrooms, Richard Miller and his 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 eight days of hearing this, and still two 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.

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.

A note of caution: As with every social phenomenon, the tendency to confirm others' expectations has its limits. Expectations can predict behavior simply because they are sometimes accurate (Jussim, 2005).

## CONCLUSIONS

We have reviewed reasons 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, 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, and 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.

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MODULE

9



# *Behavior and Belief*

*“The ancestor of every action is a thought.”*

—Ralph Waldo Emerson, *Essays, First Series*, 1841

**W**hich 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.

## **D**O 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 diverts our behavior from the dictates of our attitudes, (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 in a way that is truer to our convictions (Fazio, 1990). Likewise, attitudes formed through a significant experience are more often remembered and acted on.

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 one day 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.

In one 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 was forced to call off the planned two-week simulation after only six days.

The point is not that we are powerless to resist imposed roles. In Zimbardo's prison simulation, in Abu Ghraib Prison (where guards degraded Iraq war prisoners), and in other atrocity-producing situations, some people become sadistic and others do not (Haslam & Reicher, 2007; Mastroianni & Reed, 2006; Zimbardo, 2007). In water, salt dissolves 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).



### Activity 9.1



### Video 9.1





After the Abu Ghraib 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.”

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 evolve into what is real. In a new career, as teacher, soldier, or businessperson, we enact a role that shapes our attitudes.

### *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 position (Manis & others, 1974; Tesser & others, 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—*provided* 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 written, 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.

## The Foot-in-the-Door Phenomenon



### Activity 9.2

Most of us can recall times when, after agreeing to help out with a project or an organization, we ended up more involved than we ever intended, vowing that in the future we would say no to such requests. How does this happen? In keeping with the “attitude follows behavior” principle, experiments suggest that if you want people to do a big favor for you, an effective strategy is to get them to do a small favor first. In the best-known demonstration of this **foot-in-the-door phenomenon**, researchers posing as drive-safely 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). One project helper who went from house to house later recalled that, not knowing who had been previously visited, “I was simply stunned at how easy it was to convince some people and how impossible to convince others” (Ornstein, 1991).

Other researchers have confirmed the foot-in-the-door phenomenon with altruistic behaviors.

- Patricia Pliner and her collaborators (1974) found 46 percent of Toronto suburbanites willing to give to the Canadian Cancer Society when approached directly. Others, asked a day ahead to wear a lapel pin publicizing the drive (which all agreed to do), were nearly twice as likely to donate.
- Angela Lipsitz and others (1989) reported that ending blood-drive reminder calls with, “We’ll count on seeing you then, OK? [pause for response],” increased the show-up rate from 62 to 81 percent.
- In Internet chat rooms, Paul Markey and his colleagues (2002) requested help (“I can’t get my e-mail to work. Is there any way I can get you to send me an e-mail?”). Help increased—from 2

to 16 percent—by including a smaller prior request (“I am new to this whole computer thing. Is there any way you can tell me how to look at someone’s profile?”).

- Nicolas Guéguen and Céline Jacob (2001) tripled the rate of French Internet users contributing to child land-mine victims organizations (from 1.6 to 4.9 percent) by first inviting them to sign a petition against land mines.

Note that in these experiments, as in many of the 100+ other foot-in-the-door experiments, the initial compliance—wearing a lapel pin, stating one’s intention, signing a petition—was voluntary (Burger & Guadagno, 2003). We will see again and again that 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 [chal-DEE-nee] 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 various 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 **low-ball technique**, a tactic reportedly used by some car dealers. 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 low-balled 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 hoping the customer will agree to a higher-priced option.

Marketing researchers and salespeople have found that the principle 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 bind 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 use this technique to create a momentum of compliance. The practical lesson: Before agreeing to a small request, think about what may follow.

## *Evil Acts and Attitudes*

The attitudes-follow-behavior principle works with immoral acts as well. Evil sometimes results from gradually escalating commitments. A trifling evil act can whittle down one's moral sensitivity, making it easier to perform a worse act. To paraphrase La Rochefoucauld's *Maxims* (1665), 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.

Another way evil acts influence attitudes is the paradoxical fact that we tend not only to hurt those we dislike but also to dislike those we hurt. Several studies (Berscheid & others, 1968; Davis & Jones, 1960; Glass, 1964) found that 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. This is especially so when we are coaxed into it, not coerced. When we agree to a deed voluntarily, we take more responsibility for it.

The phenomenon appears in wartime. Prisoner-of-war camp guards would sometimes display good manners to captives in their first days on the job, but not for long. Soldiers ordered to kill may initially react with revulsion to the point of sickness over their act. But not for long (Waller, 2002). Often they will denigrate their enemies with dehumanizing nicknames.

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 do other prison staff) that their victims deserve their fate (Osofsky & others, 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 harm-doing becomes. Conscience is corroded.

To simulate the "killing begets killing" process, Andy Martens and his collaborators (2007) asked University of Arizona students to kill some bugs. They wondered: Would killing bugs in a "practice" trial increase students' willingness to kill more bugs later? To find out, they asked

**FIGURE 9-1**

**Killing begets killing.** Students who initially perceived themselves as killing several bugs, by dropping them in this apparent killing machine, later killed an increased number of bugs during a self-paced killing period. (In reality, no bugs were harmed.)

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 opaque killing machine, which had torn bits of paper to simulate the sound of a killing.) Others, who initially killed five bugs (or so they thought), 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 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. Of the children who had been given the severe threat, three-fourths now freely played with the robot; but two-thirds of those who had been given the mild deterrent still *resisted* playing with it. Apparently, the 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 apparently 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). It is a lesson worth remembering: If you wish to love someone more, act as if you do.

In 1793, Benjamin Franklin tested 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 Behavior and Racial Attitudes*

If moral action feeds moral attitudes, will positive interracial behavior 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 some 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. (For other examples of old and current racial attitudes, see Module 23.)

- 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 behavior 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. As Americans came to act more alike, they came to think more alike (Greeley & Sheatsley, 1971; Taylor & others, 1978).

## 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 this term 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 “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 during their journey home 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 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, the foot-in-the-door experience, 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 me 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 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 suggest 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 a lack of harmony (“dissonance”), when two simultaneously accessible thoughts or beliefs (“cognitions”) are



psychologically 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 spawned more than 2,000 studies (Cooper, 1999).

Dissonance theory pertains mostly to discrepancies between behavior and attitudes. We are aware of both. Thus, if we sense some inconsistency, perhaps some hypocrisy, we feel pressure for change. That helps explain why British and U.S. cigarette smokers have been much less likely than nonsmokers to believe that smoking is dangerous (Eiser & others, 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 whom the world was tolerating, had weapons of mass destruction that threatened U.S. and British security. 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 & others, 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 primary 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. If, for instance, 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. This applies 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

**attitude** A belief and feeling that can predispose our response to something or someone.

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

**foot-in-the-door phenomenon** The tendency for people who have first agreed to a small request to comply later with a larger request.

**low-ball 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.

**cognitive dissonance** Tension that arises when one is simultaneously aware of two inconsis-

tent 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 for favoring another.

**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 Susan 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

As we saw in Module 1, a given correlation may or may not be meaningful; it depends on how statistically common the correlation is. For example, if two of your friends have blue eyes and are gay, does that mean that all gay people have blue eyes? Of course not. But someone who is unaware of illusory correlations might think so.

As we noted in Module 8, it's tempting to see correlations where they don't 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. If expecting particular responses to Rorschach inkblots to be more common among people with a sexual disorder, they may, in reflecting on their experience, believe they have 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. The proof of the pudding is in the eating: 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 & others, 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 both 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, regardless of whether the data were supportive. 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, those told of the suicide 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 potential error in 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 as schizophrenic 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 from 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 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 had been told you were shy and reserved?

In a clever series of experiments at the University of Minnesota, Mark Snyder (1984), in collaboration with William Swann and others, gave interviewers some hypotheses to test concerning individuals' traits. Snyder and Swann found that 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 and expectations about another help create the kind of person we see.

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 characteristic the person had been questioned on.

In other experiments, Snyder and his colleagues (1982) tried to get people to search for behaviors that would *disconfirm* the trait they were testing. In one experiment, they told the interviewers, "It is relevant and informative to find out ways in which the person . . . may not be like the stereotype." In another experiment, Snyder (1981) offered "\$25 to the person who develops the set of questions that tell the most about . . . the interviewee." Still, confirmation bias persisted: People resisted choosing "introverted" questions when testing for extraversion.

On the basis of Snyder's experiments, can you see why the behaviors of people undergoing psychotherapy come to fit their therapists' theories (Whitman & others, 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. Thus, surmised Snyder (1981):

The psychiatrist who believes (erroneously) that adult gay males had bad childhood relationships with their mothers may meticulously probe for recalled (or fabricated) signs of tension between their gay clients and their mothers, but neglect to so carefully interrogate their heterosexual clients about their maternal relationships. No doubt, any individual could recall some friction with his or her mother, however minor or isolated the incidents.



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 VERSUS STATISTICAL PREDICTION

It will come as no surprise, given these hindsight- and diagnosis-confirming tendencies, that 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 & others, 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.

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. Robyn Dawes (1976) explained why statistical prediction is so often superior to an interviewer's intuition when predicting certain outcomes such as graduate school success:



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 overevaluation 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, contends 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 may 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 seemed to jeopardize your career goals. Perhaps the breakup of a relationship has left you in despair. At such times, you may fall into self-focused brooding that only worsens your feelings. In one survey of 90,000 American collegians, 44 percent reported that during the last school year they had at some point felt “so depressed it was difficult to function” (ACHA, 2006). For some 10 percent of men and nearly twice that many 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.

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 new studies are providing some answers.

## SOCIAL COGNITION AND DEPRESSION

People who feel depressed tend to think in negative terms. They view life through dark-colored glasses. With seriously depressed people—those who are feeling worthless, lethargic, uninterested in 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).

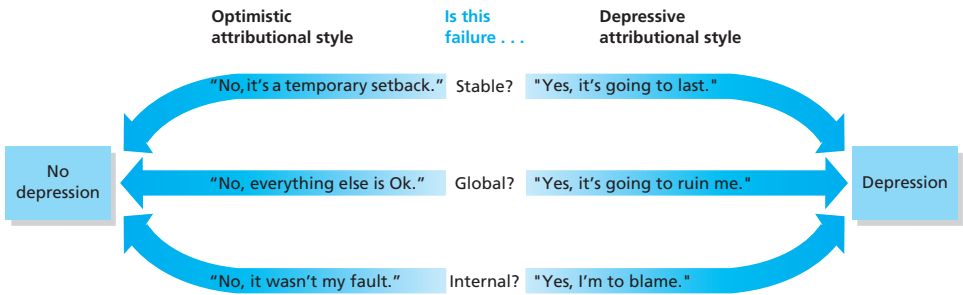
### *Distortion or Realism?*

Are all depressed people unrealistically negative? To find out, Lauren Alloy and Lyn Abramson (1979; Alloy & others, 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 the extent of their control. Despite their self-preoccupation, mildly depressed people also are more attuned to others’ feelings (Harkness & others, 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 & others, 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 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 a 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 over 100 studies involving 15,000 subjects, depressed people have been more likely than nondepressed people to exhibit a negative **explanatory style** (Haefffel &



**FIGURE 11-1**

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

others, 2008; Peterson & Steen, 2002; Sweeney & others, 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.

## 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

Without a doubt, 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 for the future dim, people's behavior seems 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). As an example, *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. Stephen Strack and James Coyne (1983) found that depressed people were realistic in thinking that others didn't appreciate their behavior; their pessimism and bad moods can even trigger social rejection (Carver & others, 1994). Depressed behavior can also trigger reciprocal depression in others. College students who have depressed roommates tend to become a little depressed themselves (Burchill & Stiles, 1988; Joiner, 1994; Sanislow & others, 1989). In dating couples, too, depression is often contagious (Katz & others, 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 become more likely to be happy in the future (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 (Hamilton & others, 1993; Kendler & others, 1993). 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 (Watkins, 2008). Insights gained during times of depressed inactivity may later result in better strategies for interacting with the world. But depression-prone people respond to bad events with intense rumination and self-blame (Mor & Winquist, 2002; Pyszczynski & others, 1991). Their self-esteem fluctuates more rapidly up with boosts and down with threats (Butler & others, 1994).

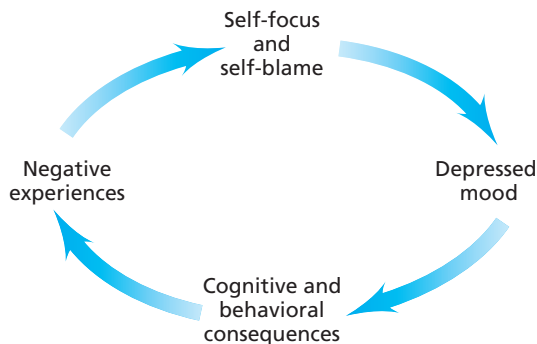
Why are some people so affected by *minor* stresses? Evidence suggests that when stress-induced rumination is filtered through a negative explanatory style, the frequent outcome is depression (Robinson & Alloy, 2003). Colin Sacks and Daphne Bugental (1987) asked some young women to get acquainted with 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 then led to negative behavior.

Such depressing rumination is more common among women, reports Susan Nolen-Hoeksema (2003). When trouble strikes, men tend to act, women tend to think—and often to “overthink,” she reports. And that helps explain why, beginning in adolescence, women have, compared with men, a doubled risk of depression (Hyde & others, 2008).

Outside the laboratory, studies of children, teenagers, and adults confirm that those with the pessimistic explanatory style are more likely to become depressed when bad things happen. One study monitored university students every six weeks for two-and-a-half years (Alloy & others, 1999). Only 1 percent of those who began college with optimistic thinking styles had a first depressive episode, but 17 percent of those with pessimistic thinking styles did. “A recipe for severe depression is preexisting pessimism encountering failure,” notes Martin Seligman (1991, p. 78). Moreover, patients who end therapy no longer feeling depressed but retaining a negative explanatory style tend to relapse as bad events occur (Seligman, 1992). If those with a more optimistic explanatory style relapse, they often recover quickly (Metalsky & others, 1993; Needles & Abramson, 1990).

Researcher Peter Lewinsohn and his colleagues (1985) have assembled these findings into a coherent psychological understanding of depression. The negative self-image, attributions, and expectations of a depressed person are, they report, 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 drastically the way a person thinks and acts, which then fuels further negative experiences, self-blame, and depressed mood. In experiments, mildly depressed people’s moods



**FIGURE 11-2**  
The vicious circle of depression.

brighten when a task diverts their attention to something external (Nix & others, 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 near-epidemic levels of depression in the Western world today. In North America, for example, young adults today are three times as likely as their grandparents to have suffered depression—despite their grandparents’ experiencing a lower standard of living and greater hardship (Cross-National Collaborative Group, 1992; Swindle & others, 2000). Seligman believes 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? 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, whether chronic or temporary, is a painful awareness that our social relationships are less numerous or meaningful than we desire. 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.” Reflecting on the finding, Robert Putnam (2006) reported that his data likewise reveal “sharp generational differences—baby boomers are more socially marooned than their parents, and the boomers’ kids are lonelier still. Is it because of two-career families? Ethnic diversity? The Internet? Suburban sprawl? Everyone has a favorite culprit. Mine is TV, but the jury is still out.”

Other researchers have offered different explanations. In a study of Dutch adults, Jenny de Jong-Gierveld (1987) documented the loneliness



that unmarried and unattached people are likely to experience. She speculated that the modern emphasis on individual fulfillment and the depreciation of marriage and family life may be “loneliness-provoking” (as well as depression-provoking). Job-related mobility also makes for fewer long-term family and social ties and increased loneliness (Dill & Anderson, 1999).

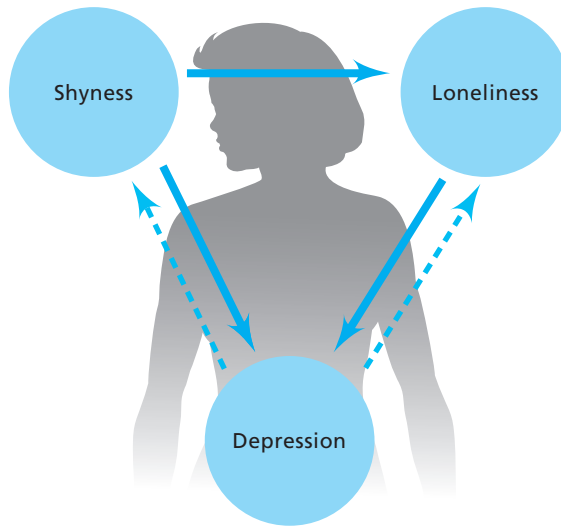
But loneliness need not coincide with aloneness. One can feel lonely in the middle of a party. “In America, there is loneliness but no solitude,” lamented Mary Pipher (2002). “There are crowds but no community.” In Los Angeles, observed her daughter, “There are 10 million people around me but nobody 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 & others, 2008).

One can be utterly alone—as I 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). It is also to be at increased risk for high blood pressure and heart disease, and thus accelerated physical decline with age (Hawkey & Cacioppo, 2007). In *Loneliness: Human Nature and the Need for Social Connection*, John Cacioppo and William Patrick (2008) explain other physical and emotional effects of loneliness, which affects stress hormones and immune activity. Loneliness—which may be evoked by an icy stare or a cold shoulder—even 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 & others, 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 & others, 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 & others, 1981; Wittenberg & Reis, 1986). 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 & others, 1996, 1997; Rook, 1984; Spitzberg & Hurt, 1987). Yet, like mildly depressed people, they are attuned to others and skilled at recognizing emotional expression (Gardner & others, 2005). Like depression, loneliness is genetically influenced; identical twins are much more likely than fraternal twins to share moderate to extreme loneliness (Boomsma & others, 2006).

## SOCIAL COGNITION AND ANXIETY

Shyness is a form of social anxiety characterized 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, such as having a casual 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. The implications for social anxiety are straightforward: *We feel anxious 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 own 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 impression on the parents of one's fiancé.
- 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 ideas 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 also 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 also 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 in living such as serious depression and extreme shyness. 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 & others, 1992). Consider two approaches, discussed below.

### *Inducing Internal Change through External Behavior*

In Module 9 we reviewed a broad range of evidence for a simple but powerful principle: 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. In one experiment, students were induced to write self-laudatory essays (Mirels & McPeck, 1977). These students, more than others who wrote essays about a current social issue, later expressed higher self-esteem when rating themselves privately for a different experimenter. In several more experiments, Edward Jones and his associates (1981; Rhodewalt & Agustsdottir, 1986) influenced students to present themselves to an interviewer in either self-enhancing or self-deprecating ways. Again, the public displays—whether upbeat or downbeat—carried 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, 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. To be around a depressed person for any length of time can be

irritating and depressing. As lonely and shy people suspect, they may indeed come across poorly in social situations. 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 actually began occasional dating.

Haemmerlie and Montgomery note that not only did all this occur without any counseling but also 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 seven 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 & others, 2000; Greenberg & others, 1992).

One such program taught depressed college students to change their typical attributions. Mary Anne Layden (1982) first explained the advantages of making attributions more like those of 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 loved and admired by everyone. Furthermore, temporary depression, loneliness, and shyness are perfectly appropriate responses to profoundly 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.

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PART THREE



# *Social Influence*

**S**ocial 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 part 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.



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MODULE

12



# *Human Nature and Cultural Diversity*

**H**ow 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? I believe we can. To see why, let’s consider the evolutionary and cultural roots of our humanity.

## **E**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 behavior tendencies. Each of us sleeps and wakes, feels hunger and thirst, and develops language through identical mechanisms. We prefer sweet tastes to sour, and we divide the visual spectrum into similar colors. We and our kin across the globe all know how to read one another’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 child’s death. As children, beginning at about 8 months of age, we display 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.

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 anthropologists tell us that if we could trace our ancestors back 100,000 or more years, we would see that we are all Africans (Shipman, 2003). In response to climate change and the availability of food, those 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. For example, 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. Still, historically, we all are Africans.

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). And, 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 reproduction and survival in that environment.
- Those offspring that do survive 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). 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 foods that are toxic. 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 them survive, reproduce, and nurture their offspring to survive and reproduce. "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, and fear? 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.

Because these 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. Evolution has prepared us to live creatively in a changing world and to adapt to environments from equatorial jungles to arctic icefields. Compared with bees, birds, and bulldogs, nature has humans on a looser genetic leash. Ironically, it is our shared human biology that 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 tea I am now drinking was not expressed until meeting a hot water environment. One study of New Zealander 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 a marital breakup (Caspi & others, 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 (Fiske & others, 1998). The cultural perspective highlights human adaptability. People's "natures are alike," said Confucius; "it is their habits that carry them far apart." And far apart we still are, 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 there are 127 million people, of whom 125 million are Japanese, internal cultural differences are minimal. In contrast, these differences are encountered many times each day by most residents of New York City, where more than one-third of the 8 million residents are foreign-born and where no ethnic group constitutes more than 37 percent of the population.

Increasingly, cultural diversity surrounds us. More and more we live in a global village, connected to our fellow villagers by e-mail, 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 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 to Pakistanis, and the result is both friendship and conflict. One in 5 Canadians and 1 in 10 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 differences as well as 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,” note 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 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 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 veil seems arbitrary and confining, but not to most in Muslim cultures. 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:

### **Expressiveness**

To someone from a relatively formal northern European culture, a person whose roots are in an expressive Mediterranean culture may seem “warm, charming, inefficient, and time-wasting.” To the Mediterranean person, the northern European may seem “efficient, cold, and overconcerned with time” (Beaulieu, 2004; Triandis, 1981).

### **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.

### **Rule-Breaking**

When people see social norms being violated, such as banned graffiti on a wall, they become more likely to follow the rule-breaking norm by violating other rules, such as littering. In six experiments, a Dutch research team led by Kees Keizer (2008) found people more than doubly likely to disobey social rules when it appeared that others were doing so. For example, when useless flyers were put on bike handles, one-third of cyclists tossed the flyer on the ground as litter when there was no graffiti on the adjacent wall. But more than two-thirds did so when the wall was covered with graffiti (Figure 12-1).

### **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



**FIGURE 12-1**

**Degraded surroundings can degrade behavior.** In a University of Groningen study, people mostly did not litter the ground with an unwanted flyer when an adjacent wall was clean, but *did* litter when the wall was graffiti-covered.

large personal space, keeping 4 feet or more between them. On uncrowded buses, or in restrooms or libraries, they protect their space and respect others' space. They let friends come closer, often within 2 or 3 feet.

Individuals differ: Some people prefer more personal space than others (Smith, 1981; Sommer, 1969; Stockdale, 1978). Groups differ, too: Adults maintain more distance than 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).

## 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, we find that 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

Roger Brown (1965, 1987; Kroger & Wood, 1992) has studied another universal norm. 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. 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 nonmutual 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 *tú* 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 “*Sie*” instead of “*du*.”

This first aspect of Brown’s 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 Europe, where most twosomes begin a relationship with the polite, formal “you” and may eventually progress to the more intimate “you,” someone obviously has to 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 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.

### **Norms of War**

Humans even have cross-cultural norms for conducting war. In the midst of killing one’s enemy, there are agreed-upon rules that have been honored for centuries. You are to wear identifiable uniforms, surrender with a gesture of submission, and treat prisoners humanely. (If you can’t kill them before they surrender, you should feed them thereafter.) These norms, though cross-cultural, are not universal. When Iraqi forces violated them by showing surrender flags and then attacking, and by dressing soldiers as liberated civilians to set up ambushes, a U.S. military spokesperson complained that “both of these actions are among the most serious violations of the laws of war” (Clarke, 2003).

So, some norms are culture-specific, others are universal. The force of culture appears in varying norms, whereas it is largely our genetic predispositions—our human nature—that account for the universality of some norms. Thus, we might think of nature as universal and nurture as culture-specific.

## 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 whoever is near us.

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MODULE

13



*Gender, Genes,  
and Culture*

There are many obvious dimensions of human diversity—height, weight, hair color, to name just 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 & others, 1992).

Later, we will consider how race and sex affect the way others regard and treat us. For now, let’s consider **gender**—the characteristics people associate with male and female. What behaviors are universally characteristic and expected of males? of females?

“Of the 46 chromosomes in the human genome, 45 are unisex,” notes 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-appearing brains (although, on average, men have more neurons and women have more neural connections). Indeed, notes 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*. Your “opposite sex” is actually your nearly identical 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, there are some differences, and it is these differences, not the many similarities, that capture attention and make news.

In both science and everyday life, differences excite interest. Compared with 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 doubly vulnerable to anxiety disorders and depression.

Compared with 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 the 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 nurturant, and more socially sensitive—those traits are not only celebrated by many feminists but also 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 (Eagly, 1994; Haddock & Zanna, 1994).

## GENDER DIFFERENCES

Let's compare men's and women's social connections, dominance, aggressiveness, and sexuality. Once we have described these few differences, 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 both 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, psychologists Nancy Chodorow (1978, 1989), Jean Baker

Miller (1986), and Carol Gilligan and her colleagues (1982, 1990) have contended that women more than men give priority to close, intimate relationships.

### **Play**

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

### **Friendship**

As adults, women in individualist cultures describe themselves in more relational terms, welcome more help, experience more relationship-linked emotions, and are more attuned to others' relationships (Addis & Mahalik, 2003; Gabriel & Gardner, 1999; Tamres & others, 2002; Watkins & others, 1998, 2003). In conversation, men more often focus on tasks and on connections with large groups, women on personal relationships (Tannen, 1990). When on the phone, women's conversations with friends last longer (Smoreda & Licoppe, 2000). When on the computer, women spend more time sending e-mails, in which they express more emotion (Crabtree, 2002; Thomson & Murachver, 2001). 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, 5 in 10 males and 7 in 10 females say it is *very* important to "help others who are in difficulty" (Sax & others, 2002).

### **Vocations**

In general, report Felicia Pratto and her colleagues (1997), 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). 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 & others, 2000; Pinker, 2008). Indeed, in most of the North American caregiving professions, such as social worker, teacher, and nurse, women outnumber men. And worldwide, women's vocational interests, compared with men's, usually relate more to people and less to things (Lippa, 2008a).

### Family Relations

Women's connections as mothers, daughters, sisters, and grandmothers bind families (Rossi & Rossi, 1990). Women spend more time caring for both preschoolers and aging parents (Eagly & Crowley, 1986). Compared with men, they 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). Asked to provide photos that portray who they are, women include more photos of parents and of themselves with others (Clancy & Dollinger, 1993). For women, especially, a sense of mutual support is crucial to marital satisfaction (Acitelli & Antonucci, 1994).

### 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. To a lesser extent, the empathy difference extends to laboratory studies. Shown slides 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 & others, 1996). Observing another receiving pain after misbehaving, women's empathy-related brain circuits display elevated activity when men's do not—after the other had misbehaved (Singer & others, 2006). Women are more likely to cry or report feeling distressed at another's distress (Eisenberg & Lennon, 1983). In a 2003 Gallup poll, 12 percent of American men, and 43 percent of women, reported having cried as a result of the war in Iraq.

All of these differences help to explain why, compared with friendships with men, 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) 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, report Marianne Schmid Mast and Judith 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. In no known societies do women usually dominate men (Pratto, 1996). 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. Yet consider:

- Women in 2008 were but 18 percent of the world's legislators (IPU, 2008).
- 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 & others, 2004; Sidanius & Pratto, 1999). In 2005, American men, by wide margins, were more supportive of capital punishment and the Iraq war (Gallup, 2005; Newport, 2007a).
- Men are half of all jurors but have been 90 percent of elected jury leaders; men are also the leaders of most ad hoc laboratory groups (Colarelli & others, 2006; Davis & Gilbert, 1989; Kerr & others, 1982).

As is typical of those in higher-status positions, men initiate most of the inviting for first dates, do most of the driving, and pick up most of the tabs (Laner & Ventrone, 1998, 2000).

Men's style of communicating undergirds their social power. In situations where roles aren't rigidly scripted, men tend to be more autocratic, women more democratic (Eagly & Carli, 2007). In leadership roles, men tend to excel as directive, task-focused leaders; women excel more often



in the “transformational” leadership that is favored by more and more organizations, with inspirational and social skills that build team spirit. Men more than women place priority on winning, getting ahead, and dominating others (Sidanius & others, 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 take more risks (Byrnes & others, 1999). One study of data from 35,000 stock broker accounts found that “men are more overconfident than women” and therefore made 45 percent more stock trades (Barber & Odean, 2001). 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 & others, 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 & Ayres, 2007). Stating the results from a female perspective, women’s influence style tends to be more indirect—less interruptive, more sensitive, more polite, less cocky.

So is it right to declare (in the title words of one 1990s best seller), *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 & others, 2006). For example, students nod more when speaking with professors than when speaking with peers, and women nod more than men (Helweg-Larsen & others, 2004). Men—and people in high-status roles—tend to talk louder and to interrupt more (Hall & others, 2005). Moreover, individuals vary; some men are characteristically hesitant and deferential, some women direct and assertive. To suggest that women and men are from different emotional 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 & others, 1996). In Canada, the male-to-female arrest ratio is 9 to 1 for murder (Statistics Canada, 2008). In the United States, where 92 percent of prisoners are male, it is also 9 to 1 (FBI, 2008). 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 once again the gender difference fluctuates with the context. When there is provocation, the gender gap shrinks (Bettencourt & Kernahan, 1997; Richardson, 2005). And within less assaultive forms of aggression—say, slapping a family member, throwing something, or verbally attacking someone—women are no less aggressive than men (Björkqvist, 1994; White & Kowalski, 1994). Indeed, says John Archer (2000, 2004, 2007) from his statistical digests of dozens of studies, women may be slightly more likely to commit indirect aggressive acts, such as spreading malicious gossip. But all across the world and at all ages, men much more often injure others with physical aggression.

## Sexuality

There is also a gender gap in sexual attitudes and assertiveness. It's true that in their physiological and subjective responses to sexual stimuli, women and men are "more similar than different" (Griffitt, 1987). Yet consider:

- "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 & others, 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 one of the 48 countries studied, it was the men who 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).
- The American Council on Education's recent survey of a quarter million first-year college students offers a similar finding. "If two people really like each other, it's all right for them to have sex even if they've known each other for only a very short time," agreed 58 percent of men but only 34 percent of women (Pryor & others, 2005).
- 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 first intercourse. How often do they think about sex? "Every day" or "several times a day," said 19 percent of women and 54 percent of men (Laumann & others, 1994). Ditto Canadians, with 11 percent of women and 46 percent of men saying "several times a day" (Fischstein & others, 2007).

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 responsiveness to visual stimuli, and more concern with partner attractiveness (Bailey & others, 1994; Peplau & Fingerhut, 2007; Schmitt, 2007). The 47 percent of coupled American lesbians is double the 24 percent of gay men who are coupled (Doyle, 2005). Among those electing 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," observes Steven Pinker (1997). "They are simply men whose male desires bounce off other male desires rather than off female desires."

Indeed, observe Roy Baumeister and Kathleen Vohs (2004; Baumeister & others, 2001), 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, are less successful at celibacy, refuse sex less often, take more risks, expend more resources to gain sex, and prefer more sexual variety. One survey asked 16,288 people from 52 nations how many sexual partners they desired in the next month. Among those 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 Baumeister and 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's offering "cheap sex," which reduces the value of their own sexuality. Across 185 countries, the more scarce are 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 commit-

ment” (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, express the gender difference (Ellis & Symons, 1990). In male-oriented erotica, women are unattached and lust driven. In romance novels, whose primary market is 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?

“What do you think is the main reason men and women have different personalities, interests, and abilities?” asked the Gallup Organization (1990) in a national survey. “Is it mainly because of the way men and women are raised, or are the differences part of their biological makeup?” Among the 99 percent who answered the question (apparently without questioning its assumptions), about the same percentage answered “upbringing” as said “biology.”

There are, of course, certain salient biological sex differences. Men’s genes predispose 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 all those domains in which the sexes faced similar adaptive challenges (Buss, 1995b). 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 dating, 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, whereas 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, nine months; men's investment may be nine 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.

Moreover, evolutionary psychology suggests, the physically dominant males were the ones who excelled in gaining access to females, which over generations enhanced male aggression and dominance as the less aggressive males had fewer chances to reproduce. Whatever genes 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). 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. 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). "Male achievement is ultimately a courtship display," says Glenn Wilson (1994). And 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 extend these observations (Buss, 1994a; Feingold, 1992a). Studies in 37 cultures, from Australia to



Video  
13.1

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. Men's greater interest in physical form also makes them the consumers of most of the world's visual pornography. 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.

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 forebearers."

## 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 an effect (such as the male-female difference in sexual initiative) and then work backward to construct an explanation for it. That approach is reminiscent of functionalism, a dominant theory in psychology during the 1920s, whose logic went like this: "Why does that behavior occur? Because it serves such and such a function." You may recognize both the evolutionary and the functionalist approaches as examples of hindsight reasoning. 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? Because there is more to bringing offspring to maturity than merely depositing sperm, men and women both gain by investing jointly in their children. Males who are loyal to their mates and offspring are more apt to ensure that their young will



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 reply that criticisms of their theories as being hindsight-based are “flat-out wrong.” They 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. Therein lies what we can all agree is culture's shaping power.

## Gender and Hormones

If genes predispose gender-related traits, they must do so by their effects on our bodies. In male embryos, the genes direct the formation of testes, which begin to secrete testosterone, the male sex hormone that influences masculine appearance. Studies indicate that girls who were exposed to excess testosterone during fetal development tend to exhibit more tomboyish play behavior than other girls (Hines, 2004). Other case studies have followed males who, having been born without penises, 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, not without 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 what's shared by a large group and transmitted across generations—ideas, attitudes, behaviors, and traditions. 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). Even in contemporary, dual-career, North American marriages, men do most of the household repairs and women arrange the child care (Bianchi & others, 2000; Fisher & others, 2007). Such behavior expectations for males and females 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 Pew Global Attitudes survey asked 38,000 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. A majority of respondents in 41 of 44 countries chose the first answer.

However, there are big country-to-country differences. Egyptians disagreed with the world majority opinion by 2 to 1, whereas Vietnamese concurred by 11 to 1. In its Global Gender Gap Report 2008, the World Economic Forum reported that Norway, Finland, and Sweden have the greatest gender equality, and Saudi Arabia, Chad, and Yemen the least. Even in industrialized societies, roles vary enormously. Women fill 1 in 10 managerial positions in Japan and Germany and nearly 1 in 2 in Australia and the United States (ILO, 1997; Wallace, 2000). In North America most doctors and dentists are men; in Russia most doctors are women, as are most dentists in Denmark.



In the last half-century—a thin slice of our long history—gender roles have changed dramatically. In 1938, just one in five Americans approved “of a married woman earning money in business or industry if she has a husband capable of supporting her.” By 1996, four in five approved (Niemi & others, 1989; NORC, 1996). In 1967, 57 percent of first-year American collegians agreed that “the activities of married women are best confined to the home and family.” In 2005, only 20 percent agreed (Astin & others, 1987; Pryor & others, 2005). (With the culture approaching a consensus on these matters, the questions are no longer asked in these surveys.)

Behavioral changes have accompanied this attitude shift. In 1965 the Harvard Business School had never granted a degree to a woman. At the turn of the twenty-first century, 30 percent of its graduates were women. From 1960 to 2005, women rose from 6 percent to 50 percent of U.S. medical students and from 3 percent to 50 percent of law students (AMA, 2004; Cynkar, 2007; Hunt, 2000; Richardson, 2005). In the mid-1960s American married women devoted *seven times* as many hours to housework as did their husbands; by the mid-1990s this was down to twice as many hours (Bianchi & others, 2000; Fisher & others, 2007).

The changing male-female roles cross many cultures, as illustrated by women’s gradually increasing representation in the parliaments of nations from Morocco to Sweden (Inglehart & Welzel, 2005; IPU, 2008). 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.

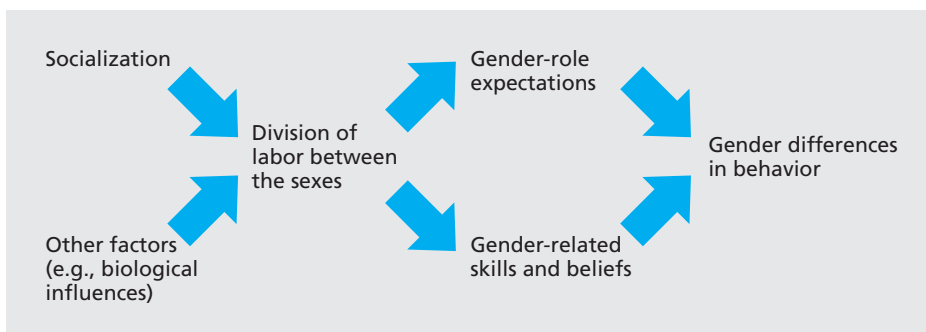
## CONCLUSIONS: BIOLOGY AND CULTURE

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. If genes and hormones predispose males to be more physically aggressive than females, culture may amplify 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 (Quarts & 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 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 U.S. study, only 1 in 720 married couples 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.

Alice Eagly and Wendy Wood (1999; Wood & Eagly, 2007) theorize how biology and culture interact (Figure 13-1). 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."



**FIGURE 13-1**

**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) and Eagly & Wood (1991).

## 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*

**Y**ou have surely experienced the phenomenon: As a controversial speaker or 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 (“this speaker doesn’t represent my views at all”). 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.

## **A** SCH’S STUDIES OF CONFORMITY

From his boyhood, Solomon Asch (1907–1996) recalls 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)

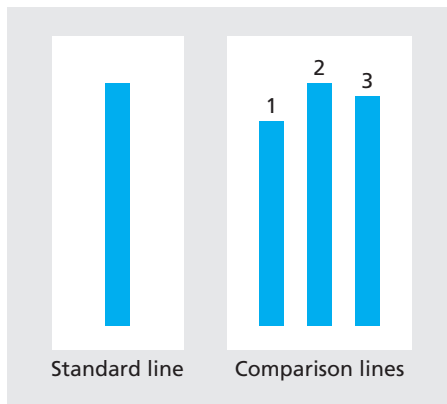


Activity  
14.1

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 taking part 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?"

Dozens of college students experienced that conflict in Asch's experiments. Those in a control condition who answered alone were correct



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



In one of Asch's conformity experiments, subject number 6 experienced uneasiness and conflict after hearing five people before him give a wrong answer.

more than 99 percent of the time. Asch wondered: If several others (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 Hodges 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 results are startling because they involved no obvious pressure to conform—there were no rewards for "team play," no punishments for individuality. If people are that conforming in response to such minimal pressure, how compliant will they be if they are directly coerced? Could someone force the average North American or European to perform cruel acts? I 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; you and I would never yield to coercion to hurt another. Or would we? Social psychologist Stanley Milgram wondered.

## MILGRAM'S OBEDIENCE EXPERIMENTS

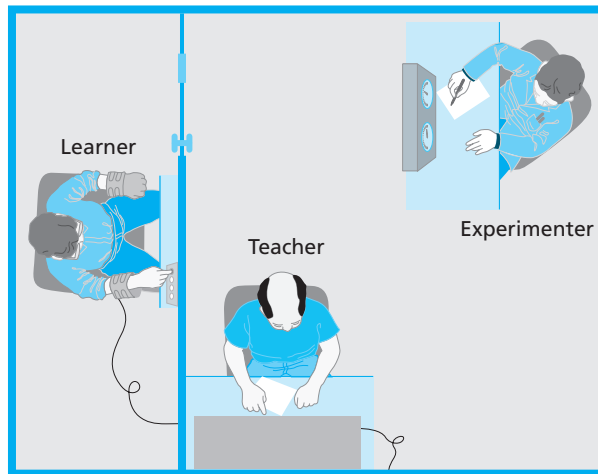
Milgram's (1965, 1974) experiments tested what happens when the demands of authority clash with the demands of conscience. These have become social psychology's most famous and controversial experiments.

“Perhaps more than any other empirical contributions in the history of social science,” notes Lee Ross (1988), “they 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: 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 (Figure 14-2), where the teacher takes his place before a “shock generator” with switches ranging from 15 to 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



**FIGURE 14-2**  
**Milgram’s obedience experiment.** Source: Milgram, 1974.

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 teacher 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 he continues to insist to be let out. 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.

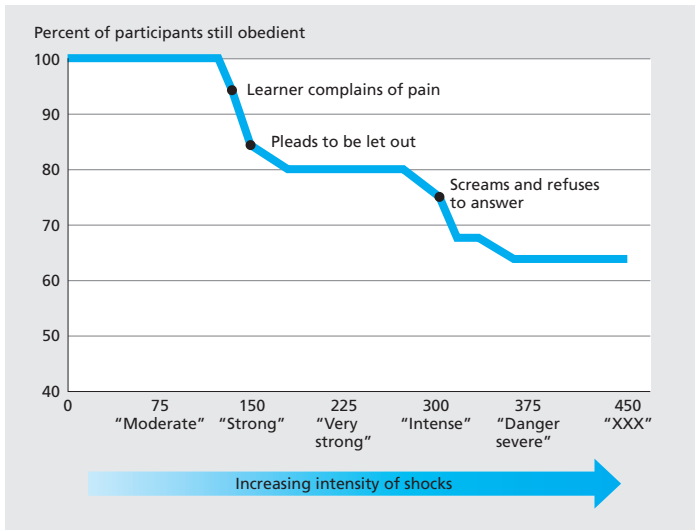
How far would you go? Milgram described the experiment to 110 psychiatrists, college students, and middle-class adults. People in all three groups guessed that they would disobey by about 135 volts; none expected to go beyond 300 volts. Recognizing that self-estimates may reflect self-serving bias, Milgram 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 one in a thousand.)

But when Milgram conducted the experiment with 40 men—a vocational mix of 20- to 50-year-olds—26 of them (65 percent) progressed all the way to 450 volts. 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 experiment—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 experiment, 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.

Having expected a low rate of **obedience**, and with plans to replicate the experiment in Germany and assess the culture difference, Milgram was disturbed (A. Milgram, 2000). So instead of going to Germany, Milgram next made 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





**FIGURE 14-3**  
**The Milgram obedience experiment.** Percentage of participants complying despite the learner's cries of protest and failure to respond. Source: From Milgram, 1965.

"although the shocks may be painful, they cause no permanent tissue damage." The learner's anguished protests were to little avail; of 40 new men in this experiment, 25 (63 percent) fully complied with the experimenter's demands (Figure 14-3). Ten later studies that included women found that women's compliance rates were similar to men's (Blass, 1999).

The obedience of his subjects disturbed Milgram. The procedures he used disturbed many social psychologists (Miller, 1986). The "learner" in these experiments 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 presumed they were doing to their victims: He stressed them against their will. Indeed, 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 experiments "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 experiments 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 experiment 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.)

## What Breeds Obedience?

Milgram did more than reveal the extent to which 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 that determined obedience were the victim's emotional distance, the authority's closeness and legitimacy, whether or not the authority was part of a respected institution, and the liberating effects of a disobedient fellow participant.

### *The 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 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 downright nasty when posting comments aimed at 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 one 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).

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. Perhaps even more compelling is an ultrasound picture of one's own developing fetus. 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 & others, 1982; Willis & Hamm, 1980).

The authority, however, must be perceived as legitimate. In another twist on the basic experiment, the experimenter 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 experimenter left, another person, who had been assigned a clerical role (actually a second confederate), assumed command. The clerk "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.

It also contrasts with the behavior of hospital nurses who in one study were called by an unknown physician and ordered to administer an obvious drug overdose (Hofling & others, 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. One said she would have replied, "I'm sorry, sir, but I am not authorized to give any medication without a written order, espe-

cially one so large over the usual dose and one that I'm unfamiliar with. If it were possible, I would be glad to do it, but this is against hospital policy and my own ethical standards." 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 experiment 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" experiment 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 significantly lower than the 65 percent rate at Yale.

## *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 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 experiment, 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 recent history: 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 experiments also differ from the other conformity experiments in the strength of the social pressure: Obedience is explicitly commanded. Without the coercion, people did not act cruelly. Yet both the Asch and the Milgram experiments share certain commonalities. They showed how compliance can take precedence over moral sense. They succeeded in pressuring people to go against their own consciences. They did more than teach an academic lesson; they sensitized us to moral conflicts in our own lives. And they illustrated and affirmed some familiar social psychological principles: the link between *behavior and attitudes* and the *power of the situation*.

### *Behavior and Attitudes*

In Module 9 we noted that attitudes fail to determine behavior when external influences override inner convictions. 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?

I think not. Recall the step-by-step entrapment of the foot-in-the-door phenomenon (Module 9) as we compare this hypothetical experiment to what Milgram's participants experienced. 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. As we saw in Module 9, 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.

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 till the village’s liberation in 1944. Here and elsewhere, the ultimate response to Nazi occupation came early. Initial helping heightened commitment, leading to more helping.

### *The Power of the Situation*

The most important lesson of Module 13—that culture is a powerful shaper of lives—and this module’s most important lesson—that immediate situational forces are just as powerful—reveal the strength of the social context. To feel this for yourself, 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 norm of being “nice” rather than confrontational. 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 each of the comments or wait to see how others reacted. But when Janet Swim and Lauri Hyers (1999) engaged other students in discussions where such comments were actually made by a male confederate, 55 percent (not 5 percent) said nothing. 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 & others, 2009). These experiments demonstrate the power of normative pressures and how hard it is to predict behavior, even our own behavior.

Milgram’s experiments 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 similarly think of Hitler’s extermination of Jews, of Saddam Hussein’s extermination of Kurds, of Osama bin Laden’s plotting terror. But evil also results from social forces—from the heat, humidity, and disease 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 of those 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 & others, 2004). 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 program 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 & others, 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 hijacker-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'" hijacker-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 to accord with others.

**obedience** Acting in accord with a direct order.

MODULE

15



## Two Routes to Persuasion

**P**ersuasion is everywhere—at the heart of politics, marketing, courtship, parenting, negotiation, evangelism, 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 promote energy conservation, to encourage breastfeeding, or to 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 effects are gradual and are most potent on weak attitudes that don’t touch our values. Yet they enable us to understand how, given enough time, such factors could produce big effects.

### 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 (Coss-ee-oh-poh) (1986; Petty & others, 2005) and Alice Eagly and Shelly Chaiken (1993)

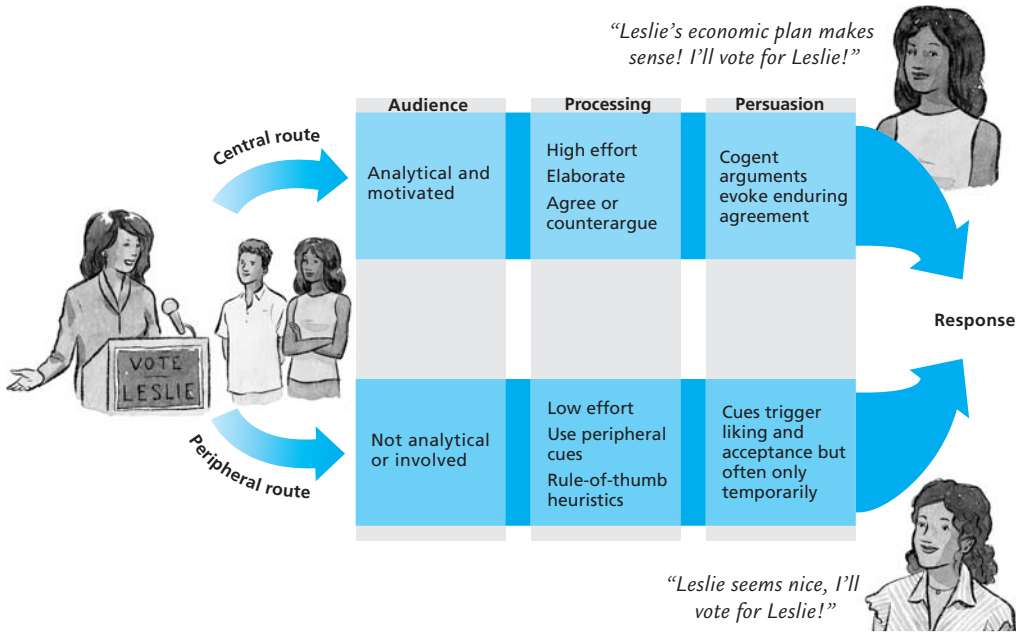


report that persuasion is likely to occur via either a central or a peripheral route. When people are motivated and able to think about an issue, they are likely to take the **central route to persuasion**—focusing on the arguments. If those arguments are strong and compelling, persuasion is likely. If the message offers only weak arguments, thoughtful people will notice that the arguments aren't very compelling and will counterargue.

But sometimes the strength of the arguments doesn't matter. Sometimes we're not motivated enough 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 noticing whether the arguments are particularly 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 one's spontaneous decision, while shopping, to pick up some ice cream of a particular brand—is made unthinkingly (Dijksterhuis & others, 2005). Something as minor as German music may lead customers to buy German wine, whereas others, hearing French music, reach for French wine (North & others, 1997). Billboards and television commercials—media that consumers are able to take in for only brief amounts of time—therefore 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 promote “the real thing” with images of youth, vitality, and happy polar bears. On the other hand, magazine computer ads (which interested, logical consumers may pore over for some time) seldom feature Hollywood stars or great athletes. Instead they offer customers information on competitive features and prices.

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 (Petty & Briñol, 2008).

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 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

**FIGURE 15-1**

**The central and peripheral routes to persuasion.** Computer ads typically take the central route, by assuming their audience wants to systematically compare features and prices. Soft-drink ads usually take the peripheral route, by merely associating their product with glamour, pleasure, and good moods. Central route processing more often produces enduring attitude change.

different sources), we usually take the easy peripheral route and accept the message without much thought (Figure 15-1).

## 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."

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). 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 (Cook & Flay, 1978; Gruder & others, 1978; Pratkanis & others, 1988). This delayed persuasion, after people forget the source or its connection with the message, is called the **sleeper effect**.

### Attractiveness

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 Jennifer Lopez 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. 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 & others, 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 & others, 1983).

*Similarity* is another. As Module 26 will emphasize, we tend to like people who are like us. We also are influenced by them, a fact that has been harnessed by a successful antismoking campaign that features youth appealing to other youth through ads that challenge 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.

Another example: Theodore Dembroski, Thomas Lasater, and Albert Ramirez (1978) gave African American junior high students an audiotaped appeal for proper dental care. When a dentist assessed the cleanliness of their teeth the next day, those who heard the appeal from an African American dentist had cleaner teeth. As a general rule, people respond better to a message that comes from someone in their group (Van Knippenberg & Wilke, 1992; Wilder, 1990).

## 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 promote central route persuasion. Common sense could lead you to either side of these questions:

- Is a logical message more persuasive—or one that arouses emotion?
- Will you get more opinion change by advocating a position only slightly discrepant from the listeners' existing opinions or by advocating an extreme point of view?
- Should the message express your side only, or should it acknowledge and refute the opposing views?
- If people are to present both sides—say, in successive talks at a community meeting or in a political debate—is there an advantage to going first or last?

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? 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 & others, 1983, 1996; Hovland & others, 1949). Thoughtful, involved audiences often travel the central route; 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 & others, 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 & others, 1982).

### *The Effect Of Good Feelings*

Messages also become more persuasive through association with good feelings. Irving Janis and his colleagues (1965; Dabbs & Janis, 1965) found that Yale students were more convinced by persuasive messages if they were allowed to enjoy peanuts and Pepsi while reading the messages. Similarly, Mark Galizio and Clyde Hendrick (1972) found that Kent State University students were more persuaded by folk-song lyrics accompanied by pleasant guitar music than they were by unaccompanied lyrics. There is, it seems, something to be gained from conducting business over sumptuous lunches with soft background music.

Good feelings often enhance persuasion, partly by enhancing positive thinking and partly by linking good feelings with the message (Petty & others, 1993). As we noted previously, 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.



### *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 & others, 2007; Muller & Johnson, 1990). By requiring cigarette makers to include graphic representations of the hazards of smoking on each pack of cigarettes, the Canadian government assumed—correctly, it turns out—that showing cigarette smokers the horrible things that can happen to smokers adds to persuasiveness (O’Hegarty & others, 2007; Peters & others, 2007; Stark & others, 2008). 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 by Howard Leventhal (1970), by Ronald Rogers and his collaborators (Robberson & Rogers, 1988), and by Natascha de Hoog and her colleagues (2007) show that, often, the more frightened and vulnerable people feel, the more they respond.

The effectiveness of fear-arousing communications is being 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.

An 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). While teens who viewed a simultaneous cerebral Philip Morris ad lecturing, “Think. Don’t Smoke” were not less likely to smoke, those viewing the more dramatic and edgy ad became significantly less inclined to smoke (Farrelly & others, 2002, 2008).

Fear-arousing communications have also been used to increase people’s detection behaviors, such as getting mammograms, doing breast or testicular self-exams, and checking for signs of skin cancer. Sara Banks, Peter Salovey, and their colleagues (1995) had women aged 40–66 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 may engage in denial because, when they aren’t told how to avoid the danger, frightening messages can be overwhelming (Leventhal,



1970; Rogers & Mewborn, 1976). For that reason, fear-arousing messages are more effective if they lead 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 & others, 2001). Many ads designed to reduce sexual risks will aim both to arouse fear—"AIDS kills"—and to offer a protective strategy: Abstain, or wear a condom, or save sex for a committed relationship.

## To Whom Is It Said? The Audience

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

### How Old Are They?

As evident during the 2008 U.S. presidential campaign—with John McCain 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. One is a *life cycle explanation*: Attitudes change (for example, become more conservative) as people grow older. The other is 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.

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 & others, 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).

Young people might therefore be advised to choose their social influences—the groups they join, the media they imbibe, the roles they adopt—carefully. In analyzing National Opinion Research Center archives, 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 sixties, the Vietnam war and moon landing of the late sixties, and the women's movement of the seventies—all of which were imprinted on the minds of younger people who experienced them as 16- to 24-year-olds. We may therefore expect that today's young adults will include events such as 9/11 and the Iraq war as memorable turning points.

That is not to say that older adults are inflexible. Studies conducted by Norval Glenn in 1980 and 1981 found that most people in their fifties and sixties had more liberal sexual and racial attitudes than they had in their thirties and forties. Given the "sexual revolution" that began in the 1960s and became mainstream in the 1970s, 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).

### **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 the 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.

Jonathan Freedman and David Sears (1965) demonstrated the difficulty of trying to persuade people under such circumstances. They warned one group of California high schoolers that they were going to hear a talk: "Why Teenagers Should Not Be Allowed to Drive." Those forewarned did not budge in their opinions. Others, not forewarned, did budge. In courtrooms, too, defense attorneys sometimes forewarn juries

about prosecution evidence to come. With mock juries, such “stealing thunder” neutralizes its impact (Dolnik & others, 2003).

***Distraction Disarms Counterarguing.*** Persuasion is also enhanced by a distraction that inhibits counterarguing (Festinger & Maccoby, 1964; Keating & Brock, 1974; Osterhouse & Brock, 1970). 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, 1981; 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 unremembered 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 & others, 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.

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 by Petty, Cacioppo, and others (Axsom & others, 1987; Haddock & others, 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.
- 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 tend to get students to think actively. They ask rhetorical questions, provide intriguing examples, and challenge students with difficult problems. All these techniques are likely to foster a process that moves information through the central route to persuasion. In classes where the instruction is less engaging, you can 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.

During the final days of a closely contested 1980 U.S. presidential campaign, Ronald Reagan effectively used rhetorical questions to stimulate desired thoughts in voters' minds. His summary statement in the presidential debate began with two potent rhetorical questions that he repeated often during the campaign's remaining week: "Are you better off than you were four years ago? Is it easier for you to go and buy things in the stores than it was four years ago?" Most people answered no, and Reagan, thanks partly to the way he prodded people to take the central route, won by a bigger-than-expected margin.

## 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 1990s, more and more psychologists had accepted the idea that social influence, one person affecting another, is at the heart of therapy.

Early analyses of psychotherapeutic influence focused on how therapists establish credible expertise and trustworthiness and how their credibility enhances their influence (Strong, 1968). Later analyses focused less on the therapist than on how the interaction affects the client's thinking (Cacioppo & others, 1991; McNeill & Stoltenberg, 1988; Neimeyer & others, 1991). 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 calculated to elicit favorable thoughts. The therapist's insights matter less than the thoughts they evoke in the client. The therapist needs to put

things in ways that a client can hear and understand, comments that will prompt agreement rather than counterargument, and that will allow time and space for the client to reflect. Questions such as “How do you respond to what I just said?” can stimulate the client’s thinking.

Martin Heesacker (1989) illustrates 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.

**sleeping effect** A delayed impact of a message that occurs when an initially discounted message becomes effective, 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.

MODULE

16



# *Indoctrination and Inoculation*

Joseph Goebbels, Germany's Minister for National Enlightenment and Propaganda from 1933 to 1945, understood the power of persuasion. Given control of publications, radio programs, motion pictures, and the arts, he undertook to persuade Germans to accept Nazi ideology in general and anti-Semitism in particular. His colleague Julius Streicher published a weekly anti-Semitic newspaper, *Der Stürmer*, the only paper read cover to cover by Adolf Hitler. Streicher also published anti-Semitic children's books and, with Goebbels, spoke at the mass rallies that became part of the Nazi propaganda machine.

How effective were Goebbels, Streicher, and other Nazi propagandists? Did they, as the Allies alleged at Streicher's Nuremberg trial, "inject poison into the minds of millions and millions" (Bytwerk, 1976)?

Most Germans were not persuaded to express raging hatred for the Jews. But many were. Others became sympathetic to measures such as firing Jewish university professors, boycotting Jewish-owned businesses, and, eventually, sending Jews to concentration camps. Most other Germans became either sufficiently uncertain or sufficiently intimidated to condone the regime's massive genocidal program, or at least to allow it to happen. Without the complicity of millions of people, there would have been no Holocaust (Goldhagen, 1996).

The powers of persuasion were apparent more recently in what a Pew survey (2003) called the "rift between Americans and Western Europeans" over the Iraq war. Surveys shortly before the war revealed that Americans favored military action against Iraq by about two to one, while Europeans were opposing it by the same margin (Burkholder, 2003; Moore, 2003; Pew, 2003). Once the war began, Americans' support

for the war rose, for a time, by more than three to one (Newport & others, 2003). Except for Israel, people surveyed in all other countries were opposed to the attack.

Without taking sides regarding the wisdom of the war—that debate we can leave to history—we can surely agree on this: The huge opinion gap between Americans and the citizens of other countries reflected persuasion. What persuaded most Americans to favor the war? What persuaded most people elsewhere to oppose it?

Attitudes were being shaped, at least in part, by persuasive messages in the U.S. media that led half of Americans to believe that Saddam Hussein was directly involved in the 9/11 attacks and four in five to falsely believe that weapons of mass destruction would be found (Duffy, 2003; Gallup, 2003; Newport & others, 2003). Sociologist James Davison Hunter (2002) notes that culture-shaping usually occurs top-down, as cultural elites control the dissemination of information and ideas. Thus, Americans, and people elsewhere, learned about and watched two different wars (della Cava, 2003; Friedman, 2003; Goldsmith, 2003; Krugman, 2003; *Tomorrow*, 2003). Depending on the country where you lived and the media available to you, you may have heard about “America’s liberation of Iraq” or “America’s invasion of Iraq.”

In the view of many Americans, the other nations’ media combined a pervasive anti-American bias with a blindness to the threat posed by Saddam. To many people elsewhere, the “embedded” American media were biased in favor of the military. Regardless of where bias lay or whose perspective was better informed, this much seems clear: Depending on where they lived, people were given (and discussed and believed) differing information. Persuasion matters.

Persuasive forces also have been harnessed to promote healthier living. Thanks in part to health-promotion campaigns, the Centers for Disease Control reports that the American cigarette smoking rate has plunged to 21 percent, half the rate of 40 years ago. *Statistics Canada* reports a similar smoking decline in Canada. And the rate of new U.S. collegians reporting abstinence from beer has increased—from 25 percent in 1981 to 41 percent in 2007 (Pryor & others, 2007).

A case in point: For three decades, Al Gore has sought to explain “an inconvenient truth” that few wanted to hear. By spewing a massive amount of carbon dioxide into the atmosphere, humanity is threatening its future. A growing scientific consensus, he reports, predicts resulting climate warming, melting icecaps, rising seas, more extreme weather, and millions of resulting deaths. With his traveling show (and resulting movie, book, and seven-continent Live Earth concert), and through the Alliance for Climate Protection, Gore’s ambition is nothing less than what James Traub (2007) calls a “program of mass persuasion.” “The central challenge,” Gore explained to Traub, “is to expand the limits of what’s now considered politically possible. The outer boundary of what’s



considered plausible today still falls far short of the near boundary of what would actually solve the crisis." Still, thanks to growing evidence and public awareness of climate change, he foresees a sudden, "nonlinear" shift in public opinion.

Is the mass persuasion mission of Al Gore, the Alliance for Climate Protection, and other kindred spirits education? Or is it propaganda?

## CULT INDOCTRINATION

On March 22, 1997, Marshall Herff Applewhite and 37 of his disciples decided the time had come to shed their bodies—mere "containers"—and be whisked up to a UFO trailing the Hale-Bopp Comet, en route to heaven's gate. So they put themselves to sleep by mixing phenobarbital into pudding or applesauce, washing it down with vodka, and then fastening plastic bags over their heads so they would suffocate in their sleep. On that same day, a cottage in the French Canadian village of St. Casimir exploded in an inferno, consuming 5 people—the latest of 74 members of the Order of the Solar Temple to have committed suicide in Canada, Switzerland, and France. All were hoping to be transported to the star Sirius, nine light-years away.

The question on many minds: What persuades people to leave behind their former beliefs and join these mental chain gangs? Should we attribute their strange behaviors to strange personalities? Or do their experiences illustrate the common dynamics of social influence and persuasion?

Bear two things in mind. First, this is hindsight analysis. It uses persuasion principles to explain, after the fact, a troubling social phenomenon. Second, explaining *why* people believe something says nothing about the *truth* of their beliefs. That is a logically separate issue. A psychology of religion might tell us *why* a theist believes in God and an atheist disbelieves, but it cannot tell us who is right. Explaining either belief does nothing to change its validity. Remember that if someone tries to discount your beliefs by saying, "You just believe that because. . .," you might recall Archbishop William Temple's reply to a questioner who challenged: "Well, of course, Archbishop, the point is that you believe what you believe because of the way you were brought up." To which the archbishop replied: "That is as it may be. But the fact remains that you believe I believe what I believe because of the way I was brought up, because of the way you were brought up."

In recent decades, several **cults**—which some social scientists prefer to call *new religious movements*—have gained much publicity: Sun Myung Moon's Unification Church, Jim Jones' People's Temple, David Koresh's Branch Davidians, and Marshall Applewhite's Heaven's Gate.

Sun Myung Moon's mixture of Christianity, anticommunism, and glorification of Moon himself as a new messiah attracted a worldwide



following. In response to Moon's declaration "What I wish must be your wish," many people committed themselves and their incomes to the Unification Church.

In 1978 in Guyana, 914 disciples of Jim Jones, who had followed him there from San Francisco, shocked the world when they died by following his order to down a suicidal grape drink laced with tranquilizers, painkillers, and a lethal dose of cyanide.

In 1993, high-school dropout David Koresh used his talent for memorizing Scripture and mesmerizing people to seize control of a faction of the Branch Davidian sect. Over time, members were gradually relieved of their bank accounts and possessions. Koresh also persuaded the men to live celibately while he slept with their wives and daughters, and he convinced his 19 "wives" that they should bear his children. Under siege after a shootout that killed 6 members and 4 federal agents, Koresh told his followers they would soon die and go with him straight to heaven. Federal agents rammed the compound with tanks, hoping to inject tear gas. By the end of the assault, 86 people were consumed in a fire that engulfed the compound.

Marshall Applewhite was not similarly tempted to command sexual favors. Having been fired from two music teaching jobs for affairs with students, he sought sexless devotion by castration, as had 7 of the other 17 Heaven's Gate men who died with him (Chua-Eoan, 1997; Gardner, 1997). While in a psychiatric hospital in 1971, Applewhite had linked up with nurse and astrology dabbler Bonnie Lu Nettles, who gave the intense and charismatic Applewhite a cosmological vision of a route to "the next level." Preaching with passion, he persuaded his followers to renounce families, sex, drugs, and personal money with promises of a spaceship voyage to salvation.

How could these things happen? What persuaded these people to give such total allegiance? Shall we make dispositional explanations—by blaming the victims? Shall we dismiss them as gullible or unbalanced? Or can familiar principles of conformity, compliance, dissonance, persuasion, and group influence explain their behavior—putting them on common ground with the rest of us who in our own ways are shaped by such forces?

## *Attitudes Follow Behavior*

As we saw in Module 9's discussion of behavior and belief, people usually internalize commitments made voluntarily, publicly, and repeatedly. Cult leaders seem to know this.

### *Compliance Breeds Acceptance*

New converts soon learn that membership is no trivial matter. They are quickly made active members of the team. Behavioral rituals, public

recruitment, and fund-raising strengthen the initiates' identities as members. As those in social-psychological experiments come to believe in what they bear witness to (Aronson & Mills, 1959; Gerard & Mathewson, 1966), so cult initiates become committed advocates. The greater the personal commitment, the more the need to justify it.

### *The Foot-in-the-Door Phenomenon*

How are people induced to make a commitment to such a drastic life change? Seldom by an abrupt, conscious decision. One does not just decide, "I'm through with mainstream religion. I'm gonna find a cult." Nor do cult recruiters approach people on the street with, "Hi. I'm a Moonie. Care to join us?" Rather, the recruitment strategy exploits the foot-in-the-door principle. Unification Church recruiters, for example, would invite people to a dinner and then to a weekend of warm fellowship and discussions of philosophies of life. At the weekend retreat, they would encourage the attenders to join them in songs, activities, and discussion. Potential converts were then urged to sign up for longer training retreats. The pattern in cults is for the activities to become gradually more arduous, culminating in having recruits solicit contributions and attempt to convert others.

Once converts have entered the cult, they find that monetary offerings are at first voluntary, then mandatory. Jim Jones eventually inaugurated a required 10-percent-of-income contribution, which soon increased to 25 percent. Finally, he ordered members to turn over to him everything they owned. Workloads also became progressively more demanding. Former cult member Grace Stoen recalls the gradual progress:

Nothing was ever done drastically. That's how Jim Jones got away with so much. You slowly gave up things and slowly had to put up with more, but it was always done very gradually. It was amazing, because you would sit up sometimes and say, wow, I really have given up a lot. I really am putting up with a lot. But he did it so slowly that you figured, I've made it this far, what the hell is the difference? (Conway & Siegelman, 1979, p. 236)

## *Persuasive Elements*

We can also analyze cult persuasion using the factors discussed in Module 15: *Who* (the communicator) said *what* (the message) to *whom* (the audience)?

### *The Communicator*

Successful cults typically have a charismatic leader—someone who attracts and directs the members. As in experiments on persuasion, a credible communicator is someone the audience perceives as expert and trustworthy—for example, as "Father" Moon.

Jim Jones used “psychic readings” to establish his credibility. Newcomers were asked to identify themselves as they entered the church before services. Then one of his aides would quickly call the person’s home and say, “Hi. We’re doing a survey, and we’d like to ask you some questions.” During the service, one ex-member recalled, Jones would call out the person’s name and say

Have you ever seen me before? Well, you live in such and such a place, your phone number is such and such, and in your living room you’ve got this, that, and the other, and on your sofa you’ve got such and such a pillow. . . . Now do you remember me ever being in your house? (Conway & Siegelman, 1979, p. 234)

Trust is another aspect of credibility. Cult researcher Margaret Singer (1979) noted that middle-class Caucasian youths are more vulnerable to recruitment because they are more trusting. They lack the “street smarts” of lower-class youths (who know how to resist a hustle) and the wariness of upper-class youths (who have been warned of kidnappers since childhood). Many cult members have been recruited by friends or relatives, people they trust (Stark & Bainbridge, 1980).

### *The Message*

The vivid, emotional messages and the warmth and acceptance with which the group showers lonely or depressed people can be strikingly appealing: Trust the master, join the family; we have the answer, the “one way.” The message echoes through channels as varied as lectures, small-group discussions, and direct social pressure.

### *The Audience*

Recruits are often young people under 25, still at that comparatively open age before attitudes and values stabilize. Some, such as the followers of Jim Jones, are less educated people who like the message’s simplicity and find it difficult to counterargue. But most are educated, middle-class people who, taken by the ideals, overlook the contradictions in those who profess selflessness and practice greed, who pretend concern and behave indifferently.

Potential converts are often at turning points in their lives, facing personal crises, or vacationing or living away from home. They have needs; the cult offers them an answer (Lofland & Stark, 1965; Singer, 1979). Gail Maeder joined Heaven’s Gate after her T-shirt shop had failed. David Moore joined when he was 19, just out of high school, and searching for direction. Times of social and economic upheaval are especially conducive to someone who can make apparent simple sense out of the confusion (O’Dea, 1968; Sales, 1972).

Most of those who have carried out suicide bombings in the Middle East (and other places such as Bali, Madrid, and London) were, likewise,

young men at the transition between adolescence and adult maturity. Like cult recruits, they come under the influence of authoritative, religiously oriented communicators. These compelling voices indoctrinate them into seeing themselves as “living martyrs” whose fleeting moment of self-destruction will be their portal into bliss and heroism. To overcome the will to survive, each candidate makes public commitments—creating a will, writing goodbye letters, making a farewell video—that create a psychological point of no return (Kruglanski & Golec de Zavala, 2005). All of this typically transpires in the relative isolation of small cells, with group influences that fan hatred for the enemy.

### Group Effects

Cults also illustrate the next module’s theme: the power of a group to shape members’ views and behavior. The cult typically separates members from their previous social support systems and isolates them with other cult members. There may then occur what Rodney Stark and William Bainbridge (1980) call a “social implosion”: External ties weaken until the group collapses inward socially, each person engaging only with other group members. Cut off from families and former friends, they lose access to counterarguments. The group now offers identity and defines reality. Because the cult frowns on or punishes disagreements, the apparent consensus helps eliminate any lingering doubts. Moreover, stress and emotional arousal narrow attention, making people “more susceptible to poorly supported arguments, social pressure, and the temptation to derogate nongroup members” (Baron, 2000).

Marshall Applewhite and Bonnie Nettles at first formed their own group of two, reinforcing each other’s aberrant thinking—a phenomenon that psychiatrists call *folie à deux* (French for “insanity of two”). As others joined them, the group’s social isolation facilitated peculiar thinking. As Internet conspiracy theory groups illustrate, virtual groups can likewise foster paranoia. Heaven’s Gate was skilled in Internet recruiting.

These techniques—increasing behavioral commitments, persuasion, and group isolation—do not, however, have unlimited power. The Unification Church successfully recruited fewer than 1 in 10 people who attended its workshops (Ennis & Verrilli, 1989). Most who joined Heaven’s Gate left before that fateful day. David Koresh ruled with a mix of persuasion, intimidation, and violence. As Jim Jones made his demands more extreme, he, too, increasingly had to control people with intimidation. He used threats of harm to those who fled the community, beatings for noncompliance, and drugs to neutralize disagreeable members. By the end, he was as much an arm twister as a mind bender.

Some of these cult influence techniques bear similarities to techniques used by more benign, widely accepted groups. Buddhist and Catholic monasteries, for example, have cloistered adherents with kindred spirits.

Fraternity and sorority members have reported that the initial “love bombing” of potential cult recruits is not unlike their own “rush” period. Members lavish prospective pledges with attention and make them feel special. During the pledge period, new members are somewhat isolated, cut off from old friends who did not pledge. They spend time studying the history and rules of their new group. They suffer and commit time on its behalf. They are expected to comply with all its demands. The result is usually a committed new member.

Much the same is true of some therapeutic communities for recovering drug and alcohol abusers. Zealous self-help groups form a cohesive “social cocoon,” have intense beliefs, and exert a profound influence on members’ behavior (Galanter, 1989, 1990).

I choose the examples of fraternities, sororities, and self-help groups not to disparage them but to illustrate two concluding observations. First, if we attribute new religious movements to the leader’s mystical force or to the followers’ peculiar weaknesses, we may delude ourselves into thinking we are immune to social control techniques. In truth, our own groups—and countless political leaders, educators, and other persuaders—successfully use many of these same tactics on us. Between education and indoctrination, enlightenment and propaganda, conversion and coercion, therapy and mind control, there is but a blurry line.

Second, the fact that Jim Jones and other cult leaders abused the power of persuasion does not mean persuasion is intrinsically bad. Nuclear power enables us to light up homes or wipe out cities. Sexual power enables us to express and celebrate committed love or exploit people for selfish gratification. Similarly, persuasive power enables us to enlighten or deceive, to promote health or to sell addictive drugs, to advance peace or stir up hatred. Knowing that these powers can be harnessed for evil purposes should alert us, as scientists and citizens, to guard against their immoral use. But the powers themselves are neither inherently evil nor inherently good; it is how we use them that determines whether their effect is destructive or constructive. Condemning persuasion because of deceit is like condemning eating because of gluttony.

## 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 credible-seeming 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 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.

### Challenging Beliefs

How might we stimulate people to commit themselves? From his experiments, Charles Kiesler (1971) offered one possible way: Mildly attack their position. Kiesler found that when committed people were attacked strongly enough to cause them to react, but not so strongly as to overwhelm them, they became even more committed. Kiesler explained: "When you attack committed people and your attack is of inadequate strength, you drive them to even more extreme behaviors in defense of their previous commitment" (p. 88). Perhaps you can recall that happening in an argument, as those involved escalated their rhetoric, committing themselves to increasingly extreme positions.

### 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 (1964) documented this in a series of experiments. McGuire wondered: Could we inoculate people against persuasion much as we inoculate them against a virus? Is there such a thing as **attitude inoculation**? Could we take people raised in a "germ-free ideological environment"—people who hold some unquestioned belief—and stimulate their mental defenses? And would subjecting them to a small dose of belief-threatening material inoculate them against later persuasion?

That is what McGuire did. First, he found some cultural truisms, such as "It's a good idea to brush your teeth after every meal if at all possible." He then showed that people were vulnerable to a powerful, credible assault on those truisms (for example, prestigious authorities were said to have discovered that too much toothbrushing can damage one's gums). If, however, before having their belief attacked, they were "immunized" by first receiving a small challenge to their belief, *and* if they read or wrote an essay in refutation of this mild attack, then they were better able to resist the powerful attack.

Remember that effective inoculation stimulates but does not overwhelm our defenses. Follow-up experiments show that when people resist but feel they've done so poorly—with weak counterarguments—their attitudes weaken and they become more vulnerable to a follow-up appeal (Tormala & others, 2006). Resisting persuasion also drains energy from our self-control system. Thus, soon after resisting, or while





A “poison parasite” ad.

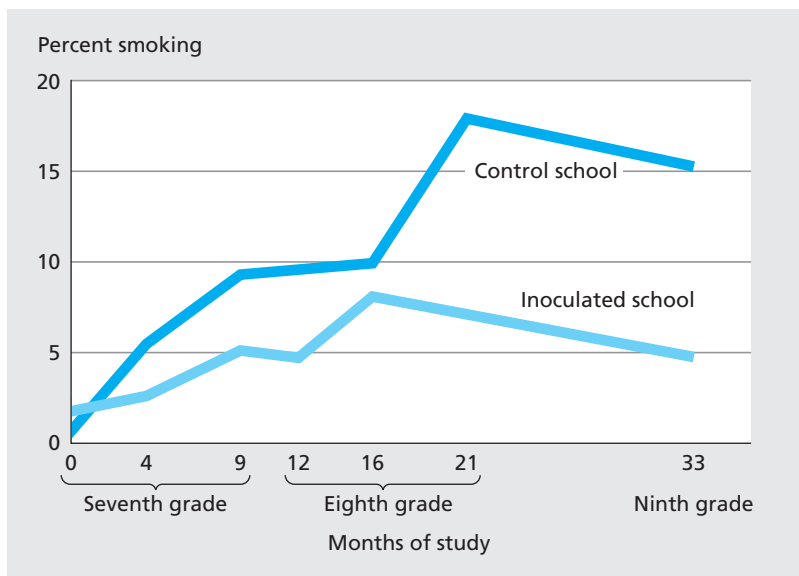
weakened by tiredness or other self-control efforts such as dieting, we may become worn down and more susceptible to persuasion (Burkley, 2008).

Robert Cialdini and his 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 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*

In a demonstration of how laboratory research findings can lead to practical applications, a research team led by Alfred McAlister (1980) had high school students “inoculate” seventh-graders against peer pressures to smoke. The seventh-graders were taught to respond to advertisements implying that liberated women smoke by saying, “She’s not really liberated if she is hooked on tobacco.” 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



**FIGURE 16-1**

The percentage of cigarette smokers at an “inoculated” junior high school was much less than at a matched control school using a more typical smoking education program. Source: Data from McAlister & others, 1980; Telch & others, 1981.

grades, the inoculated students were half as likely to begin smoking as were uninoculated students at another junior high school 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 & others, 1995, 2008; Evans & others, 1984; Flay & others, 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 decision about smoking and then announcing it, along with their reasoning, to their classmates). Some of these smoking-prevention programs require only two to six hours of



class, using prepared printed materials or videotapes. Today any school district or teacher wishing 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.

### *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 over 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).

Smokers often develop an "initial brand choice" in their teens, said a 1981 report from researchers at Philip Morris (FTC, 2003). "Today's teenager is tomorrow's potential regular customer, and the overwhelming majority of smokers first begin to smoke while still in their teens" (Lichtblau, 2003). That explains why some cigarette and smokeless tobacco companies aggressively market to college and university students, by advertising, by sponsoring parties, and by offering free cigarettes (usually in situations in which students are also drinking), all as part of their marketing of nicotine to "entry level" smokers (Farrell, 2005).

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, (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 & others, 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.

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, a team of investigators led by Norma Feshbach (1980; Cohen, 1980) gave small groups of Los Angeles-area elementary school children 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. Such experiences helped breed a more realistic understanding of commercials.

## *Implications*

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 become members of a cult, they might better teach their children about the various cults and prepare them to counter persuasive appeals.

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 in response to strong, but not weak, arguments (Levitan & 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.

Another implication is that, for the persuader, an ineffective appeal can be worse than none. Can you see why? Those who reject an appeal are inoculated against further appeals. Consider an experiment in which Susan Darley and Joel Cooper (1972) invited students to write essays advocating a strict dress code. Because that was against the students'

own positions and the essays were to be published, all chose *not* to write the essay—even those offered money to do so. After turning down the money, they became even more extreme and confident in their anti-dress code opinions. Those who have rejected initial appeals to quit smoking may likewise become immune to further appeals. Ineffective persuasion, by stimulating the listener's defenses, may be counterproductive. It may "harden the heart" against later appeals.

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

**cult (also called new religious movement)** A group typically characterized by (1) distinctive rituals and beliefs related to its devotion to a god or a person, (2) isolation from the surrounding "evil" culture, and (3) a charismatic leader.

(A sect, by contrast, is a spinoff from a major religion.)  
**attitude inoculation** Exposing people to weak attacks on their attitudes so that when stronger attacks come, they will have refutations available.

MODULE

17



# *The Mere Presence of Others*

**O**ur world contains not only 6.8 billion individuals, but 193 nation-states, 4 million local communities, 20 million economic organizations, and hundreds of millions of other formal and informal groups—couples having dinner, housemates hanging out, soldiers 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? "Mere presence" means people are not competing, do not reward or punish, and in fact do nothing except be present as a passive audience or as **co-actors**. Would the mere presence of others affect a person's jogging, eating, typing, or exam performance? The search for the answer is a scientific mystery story.

## 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 co-actors than when they worked alone.

Ensuing experiments found that others' presence improves the speed with which people do simple multiplication problems and cross out designated letters. It also improves the accuracy with which people perform simple motor tasks, such as keeping a metal stick in contact

with a dime-sized disk on a moving turntable (F. H. 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).

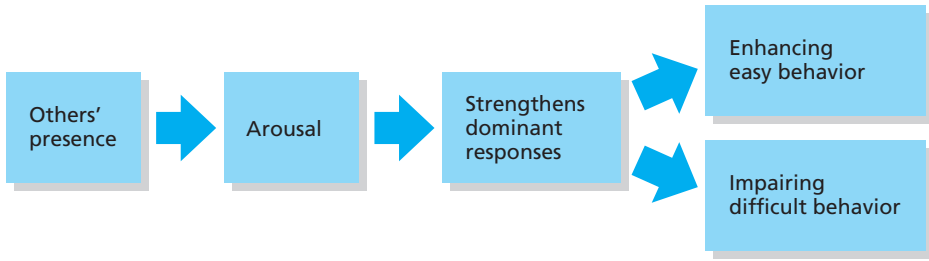
But wait: Other studies revealed that on some tasks the presence of others *hinders* performance. In the presence of others, cockroaches, parakeets, and green finches learn mazes more slowly (Allee & Masure, 1936; Gates & Allee, 1933; Klopfer, 1958). This disruptive effect also occurs with people. Others' presence diminishes efficiency at learning nonsense syllables, completing a maze, and performing complex multiplication problems (Dashiell, 1930; Pessin, 1933; Pessin & Husband, 1933).

Saying that the presence of others 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 research activity in this area had ground to a halt, and it lay dormant for 25 years until awakened by the touch of a new idea.

Social psychologist Robert Zajonc (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 principle in experimental psychology: 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 they are aroused. On complex tasks, for which the correct answer is not dominant, increased arousal promotes *incorrect* responding. On harder anagrams, such as *theloacco*, people do worse when anxious.

Could this principle solve the mystery of social facilitation? It seemed reasonable to assume that others' presence will arouse or energize people (Mullen & others, 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 for which the responses were well learned or naturally dominant. Sure enough, having others around boosted performance. Learning new material, doing a maze, and solving complex math problems were more difficult tasks for which the correct responses were initially less probable. In these cases, the presence of others increased

**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).

the number of *incorrect* responses on these tasks. 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?

After almost 300 studies, conducted with the help of more than 25,000 volunteers, 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 do!). And James Michaels and his 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 80,000 college and professional athletic events in Canada, the United States, and England reveal that home teams win about 6 in 10 games (somewhat fewer for baseball and football, somewhat more for basketball and soccer, but consistently more than half.) The home advantage may, however, also stem from the players' familiarity with their home environment, less

travel fatigue, feelings of dominance derived from territorial control, or increased team identity when cheered by fans (Zillmann & Paulus, 1993).

## 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 comrade 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 attend 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, 1986).

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 his co-workers (1979, 1980) had an accomplice listen to a humorous tape or watch a movie with other participants. When they all sat close together, the 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 & others, 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). 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 his 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 Cottrell's conclusion: The enhancement of dominant responses is strongest when people think they are being evaluated. In one experiment, individuals running on a University of California at Santa Barbara 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).

Evaluation apprehension also helps explain

- why people perform best when their co-actor is slightly superior (Seta, 1982).
- why arousal lessens when a high-status group is diluted by adding people whose opinions don't matter to us (Seta & Seta, 1992).
- why people who worry most about what others think are the ones most affected by their presence (Gastorf & others, 1980; Geen & Gange, 1983).
- why social facilitation effects are greatest when the others are unfamiliar and hard to keep an eye on (Guerin & Innes, 1982).

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.

### *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 even from a nonhuman distraction, such as bursts of light (Sanders, 1981a, 1981b).

## Mere Presence

Zajonc, however, believes 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 divided by low partitions. 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



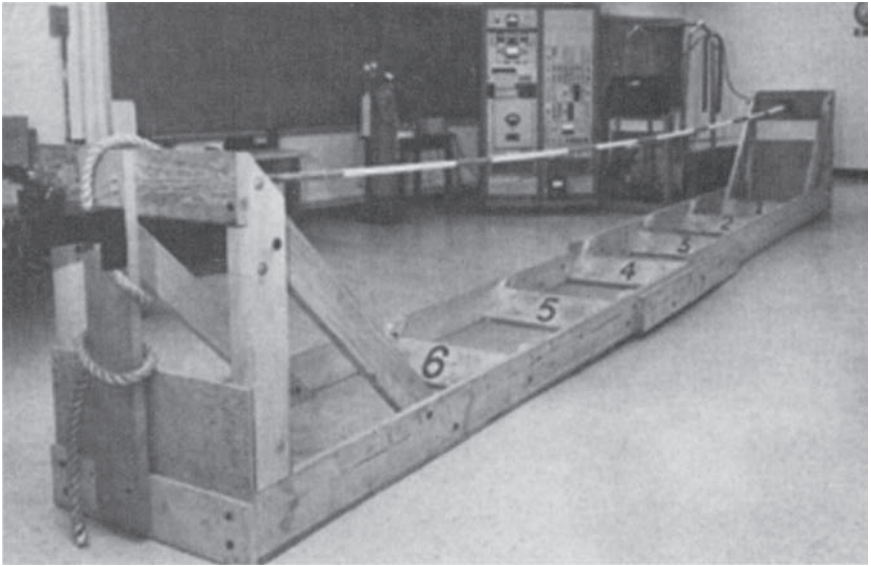
# *Many Hands Make Diminished Responsibility*

**I**n 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? What level of individual effort can we expect from members of work groups?

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 not 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—pooling 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.

## **M**ANY 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,



**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.

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 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 & others, 1980) kept their ears open for other ways to investigate this phenomenon, 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 his 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).

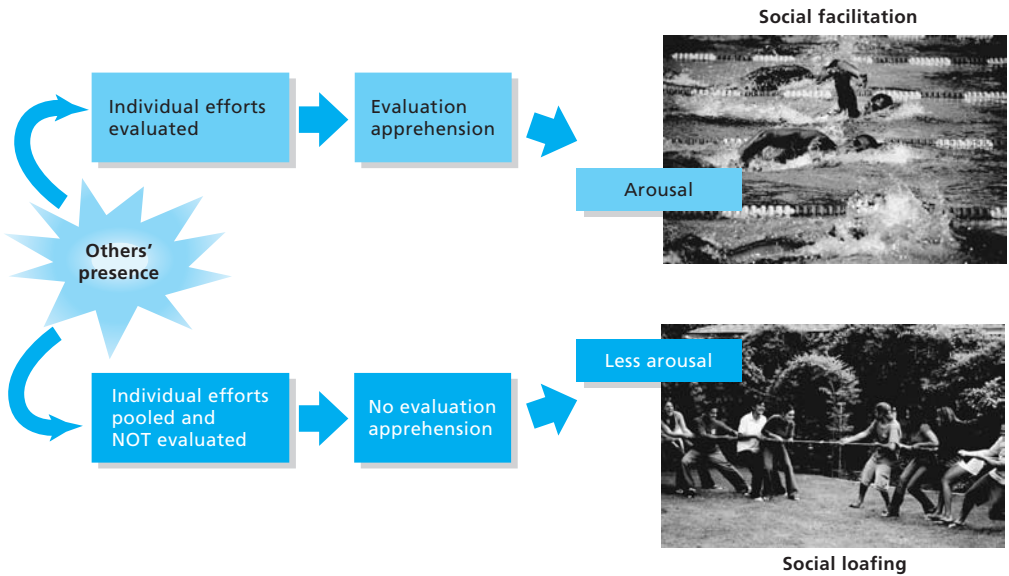
John Sweeney (1973), a political scientist interested in the policy implications of social loafing, observed the phenomenon in an experiment at the University of Texas. Students pumped exercise bicycles more energetically (as measured by electrical output) when they knew they were being individually 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 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 & others, 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

**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.

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 not be affected (Faulkner & Williams, 1996). And consider: A key job in a pickle factory once was picking the right size dill pickle halves off the conveyor belt and stuffing them into jars. Unfortunately, workers were tempted to stuff any size pickle in, because their output was not identifiable (the jars went into a common hopper before reaching the quality-control section). 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 is "decollectivizing" many of its farms (Kramer, 2008).

What about collectivist cultures under noncommunist regimes? Latané and his co-researchers (Gabrenya & others, 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 collectivist cultures do, however, exhibit less social loafing than do people in individualist cultures (Karau & Williams, 1993; Kugihara, 1999). As we noted earlier, loyalty to family and work groups runs strong in collectivist 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 benefits those organizations provide. 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). On challenging tasks, people may perceive their efforts as indispensable (Harkins & Petty, 1982; Kerr, 1983; Kerr & others, 2007). When people see others in their group as unreliable or as unable to contribute much, they work harder (Plaks & Higgins, 2000; Williams & Karau, 1991). But, in many situations, so do less capable individuals as they strive to keep up with others' greater productivity (Weber & Hertel, 2007). Adding incentives or challenging a group to strive for certain standards also promotes collective effort (Harkins & Szymanski, 1989; Sheperd & Wright, 1989).

Groups also loaf less when their members are *friends* or they feel identified with or indispensable to their group (Davis & Greenlees, 1992; Gockel & others, 2008; Karau & Williams, 1997; Worchel & others, 1998). Even just expecting to interact with someone again serves to increase effort on team projects (Groenenboom & others, 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. Latané notes that Israel's communal kibbutz farms have actually outproduced Israel's noncollective farms (Leon, 1969). 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 had 15,000 objects stolen—most of what had not previously been removed to safekeeping (Burns, 2003a, 2003b; Lawler, 2003; 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 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?

## 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).





Apparently acting without their normal conscience, people looted Iraqi institutions after the toppling of Saddam Hussein's regime.

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 harder to imagine a single rock fan screaming deliriously at a private rock concert, or a single police officer beating a defenseless offender or suspect. In group situations, people are more likely to abandon normal restraints, to lose their sense of 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. In an analysis of 21 instances in which crowds

were present as someone threatened to jump from a building or a bridge, Leon Mann (1981) found that 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.

Brian Mullen (1986) reported a similar effect associated with lynch mobs: 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.

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.

### *Physical Anonymity*

How can we be sure that the effect of crowds means greater 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).



**FIGURE 19-1**

In Philip Zimbardo’s deindividuation research, anonymous women delivered more shock to helpless victims than did identifiable women.

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.

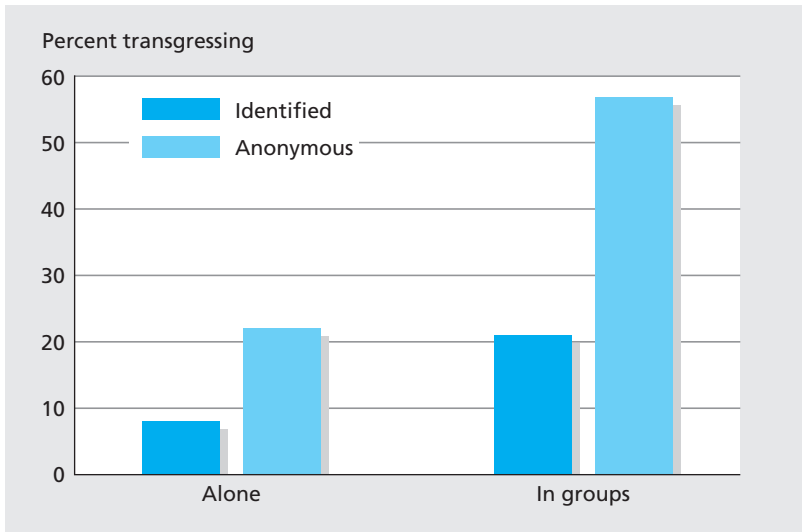
The Internet offers similar anonymity. Millions of those who were aghast at the looting by the Baghdad mobs were on those very days anonymously pirating music tracks using file-sharing software. With so many doing it, and with so little concern about being caught, downloading someone's copyright-protected property and then offloading it to an MP3 player just didn't seem terribly immoral.

In several recent cases on the Internet, 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 an analyst of technology's social effects, Jeffrey Cole. 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," Cole adds (quoted by Stelter, 2008).

Testing deindividuation on the streets, Patricia Ellison, John Govern, and their colleagues (1995) had a confederate 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 mildly aggressive act) by the car behind. Compared with drivers of convertibles and 4 × 4s 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.

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 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 me wonder about the effect of wearing uniforms. Preparing for battle, warriors in some tribal cultures (like rabid fans of some sports teams) 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.



**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 & others, 1976.

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.

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 than when their names and personal identities were stressed. From their analysis of 60 deindividuation studies, Tom Postmes and Russell Spears (1998; Reicher & others, 1995) concluded that being anonymous makes one less self-conscious, more group-conscious, and more responsive to cues present in the situation, whether negative (Klan uniforms) or positive (nurses' uniforms).

## Arousing and Distracting Activities

Aggressive outbursts by large groups often are 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. One observer of a Unification Church ritual recalls how the "choo-choo" chant helped deindividuate:

All the brothers and sisters joined hands and chanted with increasing intensity, choo-choo-choo, Choo-choo-choo, CHOO-CHOO-CHOO! YEA! YEA! POWW!!! The act made us a group, as though in some strange way we had all experienced something important together. The power of the choo-choo frightened me, but it made me feel more comfortable and there was something very relaxing about building up the energy and releasing it. (Zimbardo & others, 1977, p. 186)

Ed Diener's experiments (1976, 1979) have shown that activities such as throwing rocks and group singing can set the stage for more disinhibited behavior. There is a self-reinforcing pleasure in acting impulsively while observing others doing 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, group encounters—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. Those 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 (Sentryz & Bushman, 1998).

People made self-aware are also less likely to cheat (Beaman & others, 1979; Diener & Wallbom, 1976). So are those who generally have a strong

sense of themselves as distinct and independent (Nadler & others, 1982). In Japan, where (mirror or no mirror) people more often imagine how they might look to others, people are no more likely to cheat when not in front of a mirror (Heine & others, 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 & others, 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 & others, 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.

## CONCEPT TO REMEMBER

**deindividuation** Loss of self-awareness and evaluation apprehension; occurs in group

situations that foster responsiveness to group norms, good or bad.

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MODULE

20



# *How Groups Intensify Decisions*

**W**hich 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 ultimately are replaced with more accurate conclusions. This is a scientific mystery I can discuss firsthand, having been one of the detectives.

## **T**HE CASE OF THE “RISKY SHIFT”

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?<sup>1</sup>

<sup>1</sup>This item, constructed for my own research, illustrates the sort of decision dilemma posed by Stoner.



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

\_\_\_\_\_ 1 in 10

\_\_\_\_\_ 7 in 10

\_\_\_\_\_ 2 in 10

\_\_\_\_\_ 8 in 10

\_\_\_\_\_ 3 in 10

\_\_\_\_\_ 9 in 10

\_\_\_\_\_ 4 in 10

\_\_\_\_\_ 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.)

\_\_\_\_\_ 5 in 10

\_\_\_\_\_ 6 in 10

After making your decision, guess what this book's average reader would advise.

Having marked their advice on a dozen such 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. Dubbed the "risky shift phenomenon," this finding 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 a delightful 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 & others, 2000)?

After several years of study, we 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 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; groups discussing the “Roger” dilemma became more risk-averse than they were before discussion.

## DO GROUPS INTENSIFY OPINIONS?

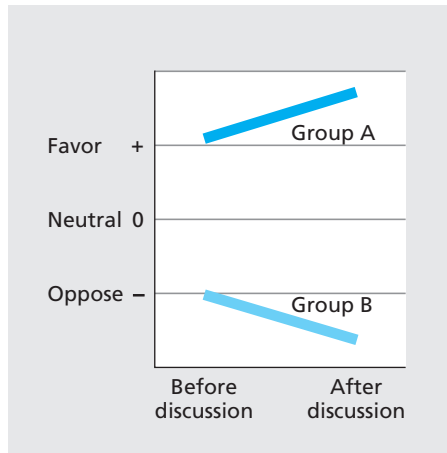
Realizing that this group phenomenon was not a consistent shift toward increased risk, we reconceived the phenomenon as a tendency for group discussion to *enhance* group members’ initial leanings. This idea led investigators to propose what French researchers Serge Moscovici and Marisa Zavalloni (1969) called group polarization: *Discussion typically strengthens the average inclination of group members.*

### Group Polarization Experiments

This new view of the changes induced by group discussion prompted experimenters to have people discuss attitude statements that most of them favored or most of them opposed. Would talking in groups enhance their shared initial inclinations as it did with the decision dilemmas? 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).

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).

**FIGURE 20-1**

**Group polarization.** The group polarization hypothesis predicts that discussion will strengthen an attitude shared by group members.

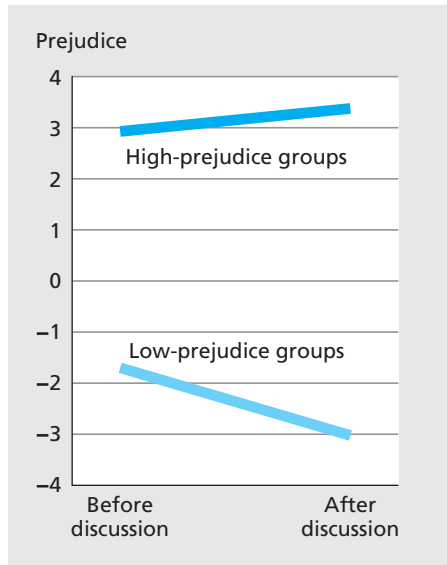
Another research strategy has been to pick issues on which opinions are divided and then isolate people who hold the same view. Does discussion with like-minded people strengthen shared views? Does it magnify the attitude gap that separates the two sides?

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).

### *Group Polarization in Everyday Life*

In everyday life people associate mostly with others whose attitudes are similar to their own. (Look at your own circle of friends.) Does everyday group interaction with like-minded friends intensify shared attitudes? Do nerds become nerdier and jocks jockier?

It happens. The self-segregation of boys into all-male groups and of girls into all-female groups accentuates over time 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, and girls with girls become more relationally oriented. On U.S. federal appellate court cases, “Republican-appointed judges tend to vote like Republicans and Democratic-appointed judges tend to vote like



**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.

Democrats,” David Schkade and Cass Sunstein (2003) have observed. But such tendencies are accentuated when among like-minded judges. “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.

### **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 become echo chambers, with opinions ricocheting off kindred-spirited friends. One experiment assembled small groups of Coloradans 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 & others, 2007).

In the United States, the end result has become a more divided country. The percentage of landslide counties—those voting 60 percent or more for one presidential candidate—nearly doubled between 1976 and 2000 (Bishop, 2004). The percentage of entering collegians declaring themselves as politically “middle of the road” dropped from 60 percent in 1983 to 45 percent in 2005, with corresponding increases in those declaring themselves on the right or the left (Pryor & others, 2005). On campuses, the clustering of students into mostly White sororities and fraternities and into ethnic minority student organizations tends to strengthen social identities and to increase antagonisms among the social groups (Sidanius & others, 2004).

In laboratory studies the competitive relationships and mistrust that individuals frequently display when playing games with one another frequently worsen when the players are in groups (Winqvist & 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 actually—no surprise to any group polarization researcher—increase the rate of problem behavior (Dishion & others, 1999).

### **Group Polarization on the Internet**

E-mail, blogs, and electronic chat rooms offer a potential new medium for like-minded people to find one another and for group interaction. On MySpace, there are tens of thousands of groups of kindred spirits discussing religion, politics, hobbies, cars, music, and you name it. The

Internet's countless virtual groups enable peacemakers and neo-Nazis, geeks and goths, conspiracy theorists and cancer survivors to isolate themselves with like-minded others and find support for their shared concerns, interests, and suspicions (Gerstenfeld & others, 2003; McKenna & Bargh, 1998, 2000; Sunstein, 2001). Without the nonverbal nuances of face-to-face contact, will such discussions produce group polarization? Will peacemakers become more pacifistic and militia members more terror prone? 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," observes Robert Wright (2003b). As broadband spreads, Internet-spawned polarization will increase, he speculates. "Ever seen one of Osama bin Laden's recruiting videos? They're very effective, and they'll reach their targeted audience much more efficiently via broadband." According to one University of Haifa analysis, terrorist websites—which grew from a dozen in 1997 to some 4,700 at the end of 2005—have increased more than four times faster than the total number of websites (Ariza, 2006).

### **Group Polarization in Terrorist Organizations**

From their analysis of terrorist organizations around 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. 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 9/11 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). Over time, 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, of which al Qaeda is a part—70 percent joined while living as expatriates. After moving to foreign places in search of jobs or education, they became 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).

Massacres, similarly, have been found to be group phenomena. The violence is enabled and escalated by the killers egging one another on (Zajonc, 2000). It is difficult to influence someone once “in the pressure cooker of the terrorist group,” notes 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 those 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, the other with how members of a group view themselves vis-à-vis the other members. The first idea is an example of *informational influence* (influence that results from accepting evidence about reality). The second is 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 & others, 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 & others, 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 & others, 1990; Hogg & others, 1990). Moreover, wanting people to like us, we may express stronger opinions after discovering that others share our views.

When we ask people (as I 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, some 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 go out with each other but each of you feared to make the first move, presuming the other probably did not have a reciprocal interest. Such pluralistic ignorance impedes the start-up of relationships (Vorauer & Ratner, 1996).

Or perhaps you can recall a time 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.

This 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—they often adjust their responses to maintain a socially favorable position (Myers, 1978). 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. Sociologist Matthew Salganik and his colleagues (2006) experimented with the phenomenon by engaging 14,341 Internet participants in listening to and, if they wished, downloading previously unknown songs. 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 in the previous modules occur in sophisticated groups such as corporate boards or the 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 that led to several major fiascos:

- *Pearl Harbor*. In the weeks preceding the December 1941 Pearl Harbor attack that put the United States into World War II, military commanders in Hawaii received a steady stream of information about Japan’s preparations for an attack on the United States somewhere in the Pacific. Then military intelligence 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 interests of group harmony, a phenomenon he called **groupthink**. In work groups, camaraderie boosts productivity (Mullen & Copper, 1994). Moreover, team spirit is good for morale. 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
- a *directive leader* who signals what decision he or she favors

When planning the ill-fated Bay of Pigs invasion, 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. These symptoms are a collective form of dissonance reduction that surface as group members try to maintain their positive group feeling when facing a threat (Turner & others, 1992, 1994).

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 on and rethinking prior decisions to escalate. Each initiative became an action to defend and justify.
- *Stereotyped view of opponent.* Participants in these groupthink tanks 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 assumption and plans, at times not by argument but 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.* Since disagreements were often uncomfortable and the groups seemed in consensus, 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."
- *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

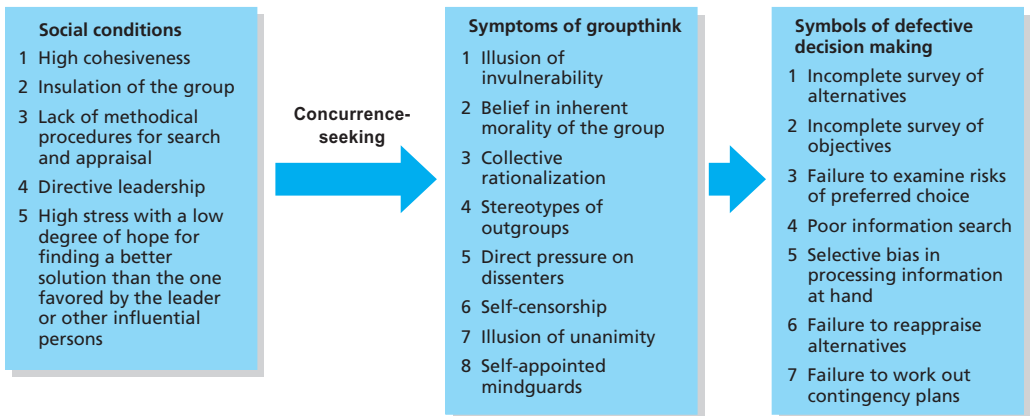
since. Albert Speer (1971), an adviser to Adolf Hitler, described the atmosphere around Hitler as one where pressure to conform suppressed all deviation. The absence of dissent created an illusion of unanimity:

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, especially for those who belonged to the upper stratum. On the contrary, every self-deception was multiplied as in a hall of distorting mirrors, becoming a repeatedly confirmed picture of a fantastical dream world which no longer bore any relationship to the grim outside world. In those mirrors I could see nothing but my own face reproduced many times over. 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 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



**FIGURE 20-3**

**Theoretical analysis of groupthink.** Source: Janis & Mann, 1977, p. 132.

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 handling of the former U.S.S.R.'s attempts to install missile bases in Cuba in 1962. 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.
- 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 her colleagues (2001a, 2001b).
- 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' pre-existing 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 to 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).

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MODULE

21



*Power to the Person*

“There 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 part on social influence teaches a great truth: *the power of the situation*. This great truth about the power of external pressures would explain our behavior if we were passive, like tumbleweeds. 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. For that reason, I’ve chosen to conclude each of these “social influence” modules by calling attention to the opposite of the great truth: *the power of the person*.

Perhaps stressing the power of culture leaves you somewhat uncomfortable. Most of us resent any suggestion that external forces determine our behavior; we see ourselves as free beings, as the originators of our actions (well, at least of our good actions). We worry that assuming cultural reasons 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 of our social behavior 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 (or culture or evolution) 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 & others, 1978).
- *People often choose their situations* (Ickes & others, 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 and join the Chamber of Commerce. They are more likely to live in San Francisco or Toronto and join Greenpeace—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 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 on* their environment. Each perspective is correct, for we are both the products and the architects of our social worlds. Is one perspective wiser, however? 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 influenced by their environments. 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 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.



Activity  
21.1

### Reactance

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 choices instead of commands: "It's time to clean up: 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 & others, 2000). In one field experiment, many nongeeky students stopped wearing a "Livestrong" wristband when nearby geeky academic students started wearing the band (Berger & Heath, 2008). Likewise, rich Brits dissociated themselves from a dissimilar group when they stopped wearing Burberry caps after they 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 drunk in the last 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).

## 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. As experiments by C. R. Snyder and Howard Fromkin (1980) have shown, people feel better when they see themselves as moderately unique. Moreover, they act in ways that will assert their individuality. In one 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 be the least responsive to majority influence (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. Among the top 10 U.S. girls’ baby names for 2007 were Isabella (2), Madison (5), and Olivia (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, notes Peggy Orenstein (2003). Hillary, a popular late ‘80s, early ‘90s name, became less original-seeming and less frequent (even among her admirers) after Hillary Clinton became famous. Although the popularity of such names then fades, observes Orenstein, it may resurface with a future generation. Max, Rose, and Sophie sound like the roster of a retirement home—or a primary school.

Seeing oneself as unique also appears in people’s “spontaneous self-concepts.” William McGuire and his Yale University colleagues (McGuire & others, 1979; McGuire & Padawer-Singer, 1978) report that when children are invited to “tell us about yourself,” they are most likely to mention their distinctive attributes. Foreign-born children are more likely than others to mention their birthplace. Redheads are more likely than black- and brown-haired children to volunteer their hair color. Light and heavy children are the most likely to refer to their body weight. Minority children are 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 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 & others, 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 American accent marks me as a foreigner, I am 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, Hutus and Tutsis, or Catholic and Protestant Northern Irish. 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; 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.

At the beginning of 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. 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 have identified several determinants of minority influence: *consistency*, *self-confidence*, and *defection*.

(Note: “Minority influence” refers to minority *opinions*, not to ethnic minorities.)

## Consistency

More influential than a minority that wavers is a minority that sticks to its position. Moscovici and his 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; Lüken & 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 & others, 1992). People may attribute your dissent to psychological peculiarities (Papastamou & Mugny, 1990). When Charlan Nemeth (1979) 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 with majority influence that often triggers unthinking

agreement, minority influence stimulates a deeper processing of arguments, often with increased creativity (Kenworthy & others, 2008; Martin & others, 2007, 2008).

University students who have racially diverse friends, or who are exposed to racial diversity in discussion groups, display less simplistic thinking (Antonio & others, 2004). With dissent from within one's own group, people take in more information, think about it in new ways, and often make better decisions (Page, 2007). Believing that one need not win friends to influence people, Nemeth quotes Oscar Wilde: "We dislike arguments of any kind; they are always vulgar, and often convincing."

Some successful companies have recognized the creativity and innovation sometimes stimulated by minority perspectives, which may contribute new ideas and stimulate colleagues to think in fresh ways. Famed for valuing "respect for individual initiative," 3M has welcomed employees' spending time on wild ideas. The Post-it<sup>®</sup> 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 rather than fact. Based on their research at Italy's University of Padova, Anne Maass and her colleagues (1996) report that minorities are less persuasive when answering a question of fact ("from which country does Italy import most of its raw oil?") than attitude ("from which country should Italy import most of its raw oil?").

## *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. In her jury-simulation experiments, Nemeth found that once defections begin, others often soon follow, initiating a snowball effect.

Are these factors that strengthen minority influence unique to minorities? Sharon Wolf and Bibb Latané (1985; Wolf, 1987) and Russell Clark (1995) believe not. They argue that the same social forces work for both majorities and minorities. Informational influence (via persuasive arguments) and normative influence (via social comparison) fuel both group polarization and minority influence. And if consistency, self-confidence, and defections from the other side strengthen the minority, such variables also strengthen a majority. The social impact of any position, majority or minority, depends on the strength, immediacy, and number of those who support it.

Anne Maass and Russell Clark (1984, 1986) agree with Moscovici, however, that minorities are more likely than majorities to convert people to *accepting* their views. And from their analyses of how groups evolve over time, John Levine and Richard Moreland (1985) conclude that new recruits to a group exert a different type of minority influence than do longtime members. Newcomers exert influence through the attention they receive and the group awareness they trigger in the old-timers. Established members feel freer to dissent and to exert leadership.

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, Clark, and others have 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."

## IS LEADERSHIP MINORITY INFLUENCE?



Activity  
21.2

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. The presidency of George W. Bush illustrates “the power of one,” observes Michael Kinsley (2003). “Before Bush brought it up [there was] no popular passion” for the idea “that Saddam was a terrible threat and had to go. . . . You could call this many things, but one of them is leadership. If real leadership means leading people where they don’t want to go, George W. Bush has shown himself to be a real leader.”

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).

*Social* leaders generally have a democratic style—one that delegates authority, welcomes input from team members, and, as we have seen, helps prevent groupthink. 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 & others, 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, vary with the situations. 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 & others, 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 score 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.

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). Charismatic leaders typically have a compelling *vision* of



some desired state of affairs, an ability to *communicate* that to others in clear and simple language, and enough optimism and faith in their group to *inspire* others to follow.

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 & others, 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 extroverts—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 & others, 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 & others, 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 Margaret Thatcher, a Thomas Jefferson or a Karl Marx, 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.