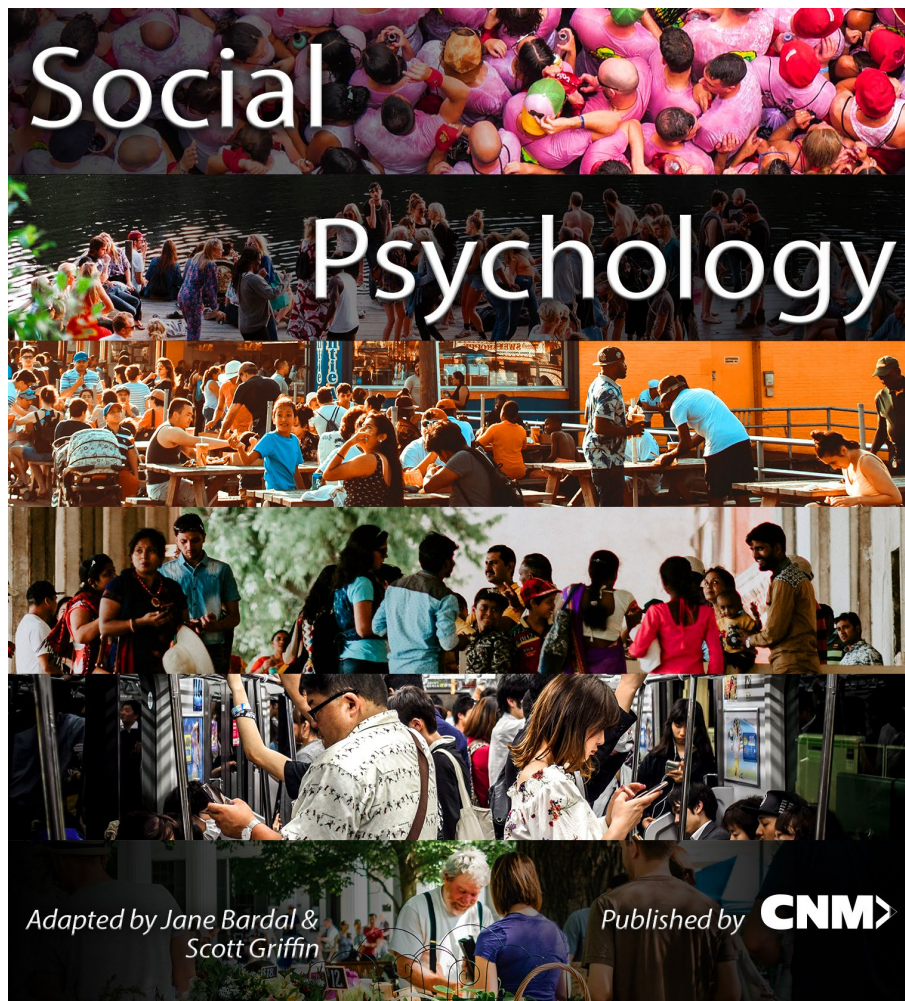




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Social Psychology



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Adapted by Jane Bardal & Scott Griffin

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1.0 Introducing Social Psychology

Mass Suicide of 39 Cult Members Shocks Nation

On March 26, 1997, people were found dead in a house on a hilltop in San Diego, California. The people were members of a cult and were part of a carefully orchestrated suicide that involved sedatives, vodka, and plastic bags. There were 21 women and 18 men, and they had come to California from across the country. Most of the victims were in their 40s, but ages ranged from 26 to 72.

The name of the cult was “Heaven’s Gate,” and it also operated a computer web service called “Higher Source.” The victims evidently believed that they were going to meet a UFO hiding behind the comet Hale-Bopp, and the suicides occurred during the time that the comet was closest to earth.

The suicide probably took place over three days and seemed to have been calm and ritualistic. One group of cult members apparently helped some other members die, cleaned up after them, and then went on to take their own doses of poison, which was mixed with apple sauce or pudding. The last two victims had plastic bags over their heads.

“It seemed to be a group decision,” said Dr. Brian Blackbourne, San Diego County medical examiner. “There were different stages, suggesting it was planned. They all had IDs. The house was immaculate. We’re not talking



about a drug-crazed, party-time situation...The drugs were taken for a very specific purpose and that was to take their own lives.”

The victims all wore black pants and black Nike sports shoes, and their faces and chests were covered in purple shrouds. The victims had carefully packed their bags and placed their few possessions at their sides. Most of the victims had a \$5 bill and some quarters in their pockets.

There was no blood found at the scene, and the only weapon in the home was a 9 mm pistol packed in a bag.

Jerry Lipscomb of the San Diego Sheriff's Department told CNN, “What we're finding is that each and every one of the members of the organization, prior to their death, gave a brief statement...The essence of those statements was that they were going to a better place.”

“It's our opinion that it was their intent—they planned to do this.”

Source: Mass suicide involved sedatives, vodka and careful planning.
CNN.com. Retrieved from
<http://edition.cnn.com/US/9703/27/suicide/index.html>.

[Social psychology](#) is the scientific study of how we feel, think, and behave toward the people around us and how our feelings, thoughts, and behaviors are influenced by those people. As this definition suggests, the subject matter of [social psychology](#) is very broad and can be found in just about everything that we do every day. Social psychologists study why we are often helpful to other people and why we may at other times be unfriendly or aggressive. Social psychologists study both the benefits of having good relationships with other people and the costs of being lonely. Social psychologists study what factors lead people to purchase one product rather than another, how men and women behave differently in social settings, how juries work together to make important group decisions, and what makes some people more likely to recycle and engage in other environmentally friendly behaviors than others. And social

psychologists also study more unusual events, such as how some people can be persuaded that a UFO is hiding behind a comet, leading them to take their own lives as part of a suicide cult.

The **main goal** of this book is to help you learn to think about social behaviors in the same way that social psychologists do. I believe you will find this approach useful because *it will allow you to think about human behavior more critically and more objectively and to gain insight into your own relationships with other people*. Social psychologists study everyday behavior scientifically, and their research creates a useful body of knowledge about our everyday social interactions.

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College level [learning](#) requires the ability to learn and remember information. You should expect to have to work on improving your skills throughout your college years. In addition, in today's world most jobs that require a college degree will also expect you to engage in life-long learning.

After reading each section you should be able to answer the review questions. Be specific in defining terms and describing research on that topic. You may need to re-read the section to pick out specific information.

To study for exams, make flashcards or write answers in a notebook to the review questions. Write the term, a definition, related research and/or a couple of examples taken from the lecture, power points, handouts, films, and textbook. Write the information in your own words, as opposed to just copying information from the text or handout. To write something in your own words, put away other materials and write a definition. If you can't do this, you don't know the concept well enough. Re-study materials until you can write a definition and come up with examples without looking at the text or handouts. Quiz yourself using the flashcards you have prepared.

College success also means learning about how to study smarter. Look at these sources for great ideas on how to make the most of your study time.

[Make It Stick: Six Tips for Students](#)

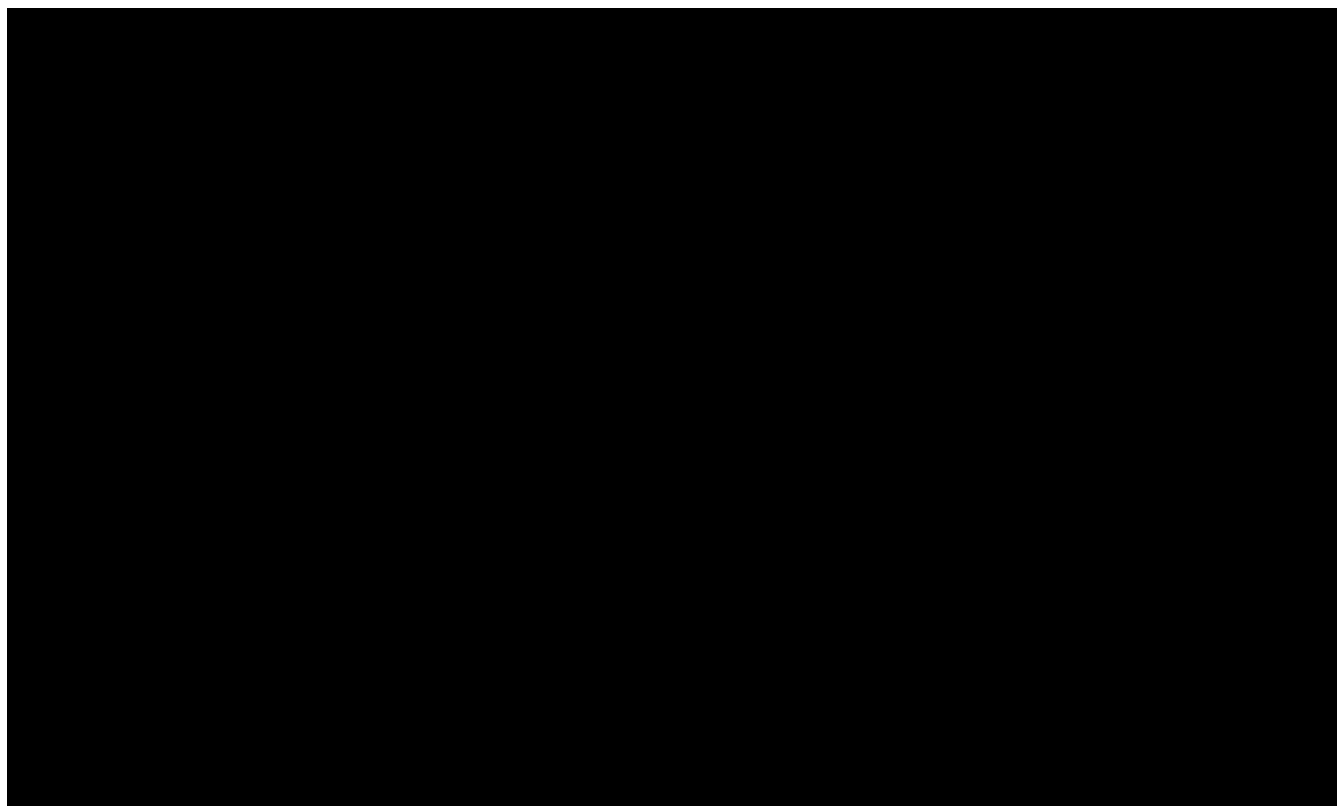


Review Questions

Which of the following is a more effective technique?

- Cramming for tests or spacing your study time?
- Taking notes by hand or by computer?
- Using recall to quiz yourself or looking over your notes?

Great learning advice from “Make it Stick: The Science of Successful [Learning](#)”



Make it Stick: The Science of Successful Learning

Don't use the excuse of “test anxiety”. People become anxious about taking tests when they can't define terms or come up with examples. Expect to spend about 3-6 hours per week outside of class for this course. Be sure you schedule study time during your week, in addition to class time. Hard work and preparation is the cure for test anxiety.

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1.1 Defining Social Psychology: History and Principles

Learning Objectives

1. Define social psychology.
2. Review the history of the field of [social psychology](#) and the topics that social psychologists study.
3. Describe and provide examples of the person-situation interaction.

The History of Social Psychology

The science of social psychology began when scientists first started to systematically and formally measure the thoughts, feelings, and behaviors of human beings (Kruglanski & Stroebe, 2011). The earliest social psychology experiments on group behavior were conducted before 1900 (Triplet, 1898), and the first social psychology textbooks were published in 1908 (McDougall, 1908/2003; Ross, 1908/1974). During the 1940s and 1950s, the social psychologists Kurt Lewin and Leon Festinger refined the experimental approach to studying behavior, creating social psychology as a rigorous scientific discipline. Lewin is sometimes known as “the father of social psychology” because he initially developed many of the important ideas of the discipline, including a focus on the dynamic interactions among people. In 1954, Festinger edited an influential book called *Research Methods in the Behavioral Sciences*, in which he and other social psychologists stressed the



need to measure variables and to use laboratory experiments to systematically test research hypotheses about social behavior. He also noted that it might be necessary in these experiments to deceive the participants about the true nature of the research. [Social psychology](#) was energized by researchers who attempted to understand how the German dictator Adolf Hitler could have produced such extreme obedience and horrendous behaviors in his followers during the Second World War. The studies on [conformity](#) conducted by Muzafir Sherif (1936) and Solomon Asch (1952), as well as those on obedience by Stanley Milgram (1974), showed the importance of conformity pressures in social groups and how people in authority could create obedience, even to the extent of leading people to cause severe harm to others. Philip Zimbardo, in his well-known “prison study” (Haney, Banks, & Zimbardo, 1973), found that ordinary male college students who were recruited to play the roles of guards and prisoners in a simulated prison became so involved in their assignments, and their interaction became so violent, that the study had to be terminated early.

The Stanford prison experiment conducted by Philip Zimbardo in the 1960s demonstrated the powerful role of the [social situation](#) on human behavior. Social psychology quickly expanded to study other topics. John Darley and Bibb Latané (1968) developed a model that helped explain when people do and do not help others in need, and Leonard Berkowitz (1974) pioneered the study of human [aggression](#). Meanwhile, other social psychologists, including Irving Janis (1972), focused on group behavior, studying why intelligent people sometimes made decisions that led to disastrous results when they worked together. Still other social psychologists, including Gordon Allport and Muzafir Sherif, focused on intergroup relations, with the goal of understanding and potentially reducing the occurrence of stereotyping, [prejudice](#), and [discrimination](#). Social psychologists gave their opinions in the 1954 Brown v. Board of Education Supreme Court case that helped end racial segregation in U.S. public schools, and social psychologists still frequently serve as expert witnesses on these and other topics (Fiske, Bersoff, Borgida, Deaux, & Heilman, 1991).

The latter part of the 20th century saw an expansion of social psychology into

the field of attitudes, with a particular emphasis on cognitive processes. During this time, social psychologists developed the first formal models of persuasion, with the goal of understanding how advertisers and other people could present their messages to make them most effective (Eagly & Chaiken, 1993; Hovland, Janis, & Kelley, 1963). These approaches to attitudes focused on the cognitive processes that people use when evaluating messages and on the relationship between attitudes and behavior. Leon Festinger's (1957) important [cognitive dissonance](#) theory was developed during this time and became a model for later research.

In the 1970s and 1980s, social psychology became even more cognitive in orientation as social psychologists used advances in cognitive psychology, which were themselves based largely on advances in computer technology, to inform the field (Fiske & Taylor, 2008). The focus of these researchers, including Alice Eagly, Susan Fiske, E. Tory Higgins, Richard Nisbett, Lee Ross, Shelley Taylor, and many others, was on [social cognition](#)—an understanding of how our knowledge about our social worlds develops through experience and the influence of these knowledge structures on memory, information processing, attitudes, and judgment. Furthermore, the extent to which humans' decision making could be flawed by both cognitive and motivational processes was documented (Kahneman, Slovic, & Tversky, 1982).

In the 21st century, the field of social psychology has been expanding into still other areas. Examples that we will consider in this book include an interest in how social situations influence our health and happiness, the important roles of evolutionary experiences and cultures on our behavior, and the field of [social neuroscience](#)—the study of how our social behavior both influences and is influenced by the activities of our brain (Lieberman, 2010). Social psychologists continue to seek new ways to measure and understand social behavior, and the field continues to evolve. I cannot predict where social psychology will be directed in the future, but I have no doubt that it will still be alive and vibrant.

The Person and the Social Situation

Social psychology is the study of the dynamic relationship between individuals and the people around them. Each of us is different, and our individual characteristics, including our personality traits, desires, motivations, and emotions, have an important impact on our social behavior. But our behavior is also profoundly influenced by the social situation—the people with whom we interact every day. These people include our friends and family, our fraternity brothers or sorority sisters, our religious groups, the people we see on TV or read about or interact with on the web, as well as people we think about, remember, or even imagine.

Social psychology is largely the study of the social situation. Our social situations create [social influence](#), the process through which other people change our thoughts, feelings, and behaviors and through which we change theirs. Maybe you can already see how the social influence provided by the members of the Heaven's Gate cult was at work in the Hale-Bopp suicide. Kurt Lewin formalized the joint influence of person variables and situational variables, which is known as the person-situation interaction, in an important equation:

Behavior = f (person, social situation).

Lewin's equation indicates that the behavior of a given person at any given time is a function of (depends on) both the characteristics of the person and the influence of the social situation.

The Social Situation Creates Powerful Social Influence

When people are asked to indicate the things that they value the most, they usually mention their social situation—that is, their relationships with other people (Baumeister & Leary, 1995; Fiske & Haslam, 1996). When we work together on a class project, volunteer at a homeless shelter, or serve on a jury in a courtroom trial, we count on others to work with us to get the job done. We

develop social bonds with those people, and we expect that they will come through to help us meet our goals. The importance of others shows up in every aspect of our lives—other people teach us what we should and shouldn't do, what we should and shouldn't think, and even what we should and shouldn't like and dislike.

In addition to the people with whom we are currently interacting, we are influenced by people who are not physically present but who are nevertheless part of our thoughts and feelings. Imagine that you are driving home on a deserted country road late at night. No cars are visible in any direction, and you can see for miles. You come to a stop sign. What do you do? Most likely, you stop at the sign, or at least slow down. You do so because the behavior has been internalized: Even though no one is there to watch you, others are still influencing you—you've learned about the rules and laws of society, what's right and what's wrong, and you tend to obey them. We carry our own personal social situations—our experiences with our parents, teachers, leaders, authorities, and friends—around with us every day.

An important principle of social psychology, one that will be with us throughout this book, is that although individuals' characteristics do matter, the social situation is often a stronger determinant of behavior than is personality. When social psychologists analyze an event such as a cult suicide, they are likely to focus more on the characteristics of the situation (e.g., the strong leader and the group pressure provided by the other group members) than on the characteristics of the cult members themselves. As an example, we will see that even ordinary people who are neither bad nor evil in any way can nevertheless be placed in situations in which an authority figure is able to lead them to engage in evil behaviors, such as applying potentially lethal levels of electrical shock (Milgram, 1974).

In addition to discovering the remarkable extent to which our behavior is influenced by our social situation, social psychologists have discovered that we often do not recognize how important the social situation is in determining behavior. We often wrongly think that we and others act entirely on our own

accord, without any external influences. It is tempting to assume that the people who commit extreme acts, such as terrorists or members of suicide cults, are unusual or extreme people. And yet much research suggests that these behaviors are caused more by the social situation than they are by the characteristics of the individuals and that it is wrong to focus so strongly on explanations of individuals' characteristics (Gilbert & Malone, 1995).

There is perhaps no clearer example of the powerful influence of the social situation than that found in research showing the enormous role that others play in our physical and mental health. [Social support](#) refers to the comfort that we receive from the people around us—for instance, our family, friends, classmates, and coworkers (Diener, Suh, Lucas, & Smith, 1999; Diener, Tamir, & Scollon, 2006).

Social Influence Creates Social Norms

In some cases, social influence occurs rather passively, without any obvious intent of one person to influence the other, such as when we learn about and adopt the beliefs and behaviors of the people around us, often without really being aware that we are doing so. [Social influence](#) occurs when a young child adopts the beliefs and values of his or her parents or when we start liking jazz music, without really being aware of it, because our roommate plays a lot of it. In other cases, social influence is anything but subtle; it involves one or more individuals actively attempting to change the beliefs or behaviors of others, as is evident in the attempts of the members of a jury to get a dissenting member to change his or her opinion, the use of a popular sports figure to encourage children to buy products, or the messages that cult leaders give to their followers to encourage them to engage in the behaviors required of the group.

One outcome of social influence is the development of [social norms](#)—the ways of thinking, feeling, or behaving that are shared by group members and perceived by them as appropriate (Asch, 1955; Cialdini, 1993). Norms include customs, traditions, standards, and rules, as well as the general values of the group. Through norms, we learn what people actually do (“people in the United

States are more likely to eat scrambled eggs in the morning and spaghetti in the evening, rather than vice versa”) and also what we should do (“do unto others as you would have them do unto you”) and shouldn’t do (“do not make racist jokes”). There are norms about almost every possible social behavior, and these norms have a big influence on our actions.

Different Cultures Have Different Norms

The social norms that guide our everyday behaviors and that create social influence derive in large part from our [culture](#). A culture represents a group of people, normally living within a given geographical region, who share a common set of social norms, including religious and family values and moral beliefs (Fiske, Kitayama, Markus, & Nisbett, 1998; Matsumoto, 2001). The culture in which we live affects our thoughts, feelings, and behavior through teaching, imitation, and other forms of social transmission (Mesoudi, 2009). It is not inappropriate to say that our culture defines our lives just as much as our evolutionary experience does.

Cultures differ in terms of the particular norms that they find important and that guide the behavior of the group members. Social psychologists have found that there is a fundamental difference in social norms between Western cultures (including the United States, Canada, Western Europe, Australia, and New Zealand) and East Asian cultures (including China, Japan, Taiwan, Korea, India, and Southeast Asia). Norms in Western cultures are primarily oriented toward [individualism](#)—cultural norms, common in Western societies, that focus primarily on self-enhancement and independence. Children in Western cultures are taught to develop and value a sense of their personal self and to see themselves as largely separate from the people around them. Children in Western cultures feel special about themselves—they enjoy getting gold stars on their projects and the best grade in the class (Markus, Mullally, & Kitayama, 1997). Adults in Western cultures are oriented toward promoting their own individual success, frequently in comparison with (or even at the expense of) others. When asked to describe themselves, individuals in Western cultures generally tend to indicate that they like to “do their own thing,” prefer to live

their lives independently, and base their happiness and self-worth upon their own personal achievements. In short, in Western cultures the emphasis is on [self-concern](#).

Norms in the East Asian cultures, on the other hand, are more focused on [other-concern](#). These norms indicate that people should be more fundamentally connected with others and thus are more oriented toward interdependence, or [collectivism](#). In East Asian cultures, children are taught to focus on developing harmonious social relationships with others, and the predominant norms relate to group togetherness, connectedness, and duty and responsibility to one's family. The members of East Asian cultures, when asked to describe themselves, indicate that they are particularly concerned about the interests of others, including their close friends and their colleagues. As one example of these cultural differences, research conducted by Shinobu Kitayama and his colleagues (Uchida, Norasakkunkit, & Kitayama, 2004) found that East Asians were more likely than Westerners to experience happiness as a result of their connections with other people, whereas Westerners were more likely to experience happiness as a result of their own personal accomplishments. People from Western cultures are, on average, more individualistic than people from Eastern cultures, who are, on average, more collectivistic.

Other researchers have studied other cultural differences, such as variations in orientations toward time. Some cultures are more concerned with arriving and departing according to a fixed schedule, whereas others consider time in a more flexible manner (Levine & Norenzayan, 1999). Levine and colleagues (1999) found that "the pace of life," as assessed by average walking speed in downtown locations and the speed with which postal clerks completed a simple request, was fastest in Western countries (but also including Japan) and slowest in economically undeveloped countries. It has also been argued that there are differences in the extent to which people in different cultures are bound by social norms and customs, rather than being free to express their own individuality without regard to considering social norms (Gelfand et al., 1996). And there are also cultural differences regarding personal space, such as how close individuals stand to each other when talking, as well as differences in the

communication styles individuals employ.

It is important to be aware of cultures and cultural differences, at least in part because people with different cultural backgrounds are increasingly coming into contact with each other as a result of increased travel and immigration and the development of the Internet and other forms of communication. In the United States, for instance, there are many different ethnic groups, and the proportion of the population that comes from minority (non-White) groups is increasing from year to year. Minorities will account for a much larger proportion of the total new entries into the U.S. workforce over the next decades. In fact, minorities, which are now roughly one third of the U.S. population, are expected to become the majority by 2042, and the United States is expected to be 54% minority by 2050. By 2023, more than half of all children will be minorities (U.S. Census Bureau, n.d.). These changes will result in considerable growth in cultural diversity in the United States, and although this will create the potential for useful [cooperation](#) and productive interaction, it may also produce unwanted social conflict. Being aware of cultural differences and considering their influence on how we behave toward others is an important part of a basic understanding of social psychology and a topic that we will return to frequently in this book.

Key Takeaways

- The history of social psychology includes the study of attitudes, group behavior, [altruism](#) and aggression, culture, prejudice, and many other topics.
- Social psychologists study real-world problems using a scientific approach.
- Thinking about your own interpersonal interactions from the point of view of social psychology can help you better understand and respond to them.
- Social psychologists study the person-situation interaction: how characteristics of the person and characteristics of the social situation

interact to determine behavior.

- Many human social behaviors have been selected by [evolutionary adaptation](#).
- The social situation creates social norms—shared ways of thinking, feeling, and behaving.
- Cultural differences—for instance, in individualistic versus collectivistic orientations—guide our everyday behavior.

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1.2 Conducting Research in Social Psychology

Learning Objectives

1. Explain why social psychologists rely on empirical methods to study social behavior.
2. Provide examples of how social psychologists measure the variables they are interested in.
3. Review the three types of research designs, and evaluate the strengths and limitations of each type.
4. Consider the role of validity in research, and describe how research programs should be evaluated.

Social psychologists are not the only people interested in understanding and predicting social behavior or the only people who study it. Social behavior is also considered by religious leaders, philosophers, politicians, novelists, and others, and it is a common topic on TV shows. But the social psychological approach to understanding social behavior goes beyond the mere observation of human actions. Social psychologists believe that a true understanding of the causes of social behavior can only be obtained through a systematic scientific approach, and that is why they conduct scientific research. Social psychologists believe that the study of social behavior should be [empirical](#)—that is, based on the collection and systematic analysis of observable data.



The Importance of Scientific Research

Because [social psychology](#) concerns the relationships among people, and because we can frequently find answers to questions about human behavior by using our own common sense or intuition, many people think that it is not necessary to study it empirically (Lilienfeld, 2011). But although we do learn about people by observing others and therefore social psychology is in fact partly common sense, social psychology is not entirely common sense.

In case you are not convinced about this, perhaps you would be willing to test whether or not social psychology is just common sense by taking a short true-or-false quiz. If so, please have a look at Table 1.1 “Is [Social Psychology](#) Just Common Sense?” and respond with either “True” or “False.” Based on your past observations of people’s behavior, along with your own common sense, you will likely have answers to each of the questions on the quiz. But how sure are you? Would you be willing to bet that all, or even most, of your answers have been shown to be correct by scientific research? Would you be willing to accept your score on this quiz for your final grade in this class? If you are like most of the students in my classes, you will get at least some of these answers wrong. (To see the answers and a brief description of the scientific research supporting each of these topics, please go to the Chapter Summary at the end of this chapter.)

TABLE 1.1 IS SOCIAL PSYCHOLOGY JUST COMMON SENSE?

Answer each of the following questions, using your own intuition, as either true or false.
Opposites attract.
An athlete who wins the bronze medal (third place) in an event is happier about his or her performance than the athlete who wins the silver medal (second place).
Having good friends you can count on can keep you from catching colds.
Subliminal advertising (i.e., persuasive messages that are displayed out of our awareness on TV or movie screens) is very effective in getting us to buy products.
The greater the reward promised for an activity, the more one will come to

enjoy engaging in that activity.

Physically attractive people are seen as less intelligent than less attractive people.

Punching a pillow or screaming out loud is a good way to reduce frustration and aggressive tendencies.

People pull harder in a tug-of-war when they're pulling alone than when pulling in a group.

One of the reasons we might think that social psychology is common sense is that once we learn about the outcome of a given event (e.g., when we read about the results of a research project), we frequently believe that we would have been able to predict the outcome ahead of time. For instance, if half of a class of students is told that research concerning attraction between people has demonstrated that “opposites attract,” and if the other half is told that research has demonstrated that “birds of a feather flock together,” most of the students in both groups will report believing that the outcome is true and that they would have predicted the outcome before they had heard about it. Of course, both of these contradictory outcomes cannot be true. The problem is that just reading a description of research findings leads us to think of the many cases that we know that support the findings and thus makes them seem believable. The tendency to think that we could have predicted something that we probably would not have been able to predict is called the [hindsight bias](#).

Our common sense also leads us to believe that we know why we engage in the behaviors that we engage in, when in fact we may not. Social psychologist Daniel Wegner and his colleagues have conducted a variety of studies showing that we do not always understand the causes of our own actions. When we think about a behavior before we engage in it, we believe that the thinking guided our behavior, even when it did not (Morewedge, Gray, & Wegner, 2010). People also report that they contribute more to solving a problem when they are led to believe that they have been working harder on it, even though the effort did not increase their contribution to the outcome (Preston & Wegner, 2007). These findings, and many others like them, demonstrate that our beliefs about the

causes of social events, and even of our own actions, do not always match the true causes of those events.

Social psychologists conduct research because it often uncovers results that could not have been predicted ahead of time. Putting our hunches to the test exposes our ideas to scrutiny. The scientific approach brings a lot of surprises, but it also helps us test our explanations about behavior in a rigorous manner. It is important for you to understand the research methods used in psychology so that you can evaluate the validity of the research that you read about here, in other courses, and in your everyday life.

Measuring Affect, Behavior, and Cognition

One important aspect of using an empirical approach to understand social behavior is that the concepts of interest must be measured. For example, if we want to measure hostility, a psychologist could ask people to answer questions about how they react to certain situations. In scientific terms, the characteristics that we are trying to measure are known as conceptual variables (example: hostility), and the particular method that we use to measure a variable of interest is called an operational definition (people's self-reported reactions).

Hostility questionnaire – Which reaction is most likely for you?

1. An elevator takes a long time to arrive where I am waiting.
 - a. I feel annoyed.
 - b. I take the opportunity to relax for a couple of minutes.
2. A driver cuts me off in traffic.
 - A. I am thankful that I avoided an accident.
 - B. I honk my horn and flash my lights.

One approach to measurement involves directly asking people about their

perceptions using [self-report measures](#). [Self-report measures](#) are measures in which individuals are asked to respond to questions posed by an interviewer or on a questionnaire. Generally, because any one question might be misunderstood or answered incorrectly, in order to provide a better measure, more than one question is asked and the responses to the questions are averaged together.

Although it is easy to ask many questions on self-report measures, these measures have a potential disadvantage. As we have seen, people’s insights into their own opinions and their own behaviors may not be perfect, and they might also not want to tell the truth. Therefore, an alternative to self-report that can sometimes provide a more valid measure is to measure behavior itself. Behavioral measures are *measures designed to directly assess what people do*.

TABLE 1.3 EXAMPLES OF OPERATIONAL DEFINITIONS OF [CONCEPTUAL VARIABLES](#) IN SOCIAL PSYCHOLOGICAL RESEARCH

Conceptual variable	Operational definitions
Aggression	Number of presses of a button that administers loud noise to another student
Obedience	Shock level the participant delivers to another person when directed by the experimenter.
Conformity	Giving the wrong answer to simple questions when other people have also given the wrong answer.
Helping	How many people help a person in what appears to be an emergency.;
Prejudice	Number of inches that a person places their chair away from another person

Social Neuroscience: Measuring Social Responses in the Brain

Still another approach to measuring our thoughts and feelings is to measure brain activity, and recent advances in brain science have created a wide variety of new techniques for doing so. One approach, known as [electroencephalography \(EEG\)](#), is a technique that records the electrical activity produced by the brain's neurons through the use of electrodes that are placed around the research participant's head. An electroencephalogram (EEG) can show if a person is asleep, awake, or anesthetized because the brain wave patterns are known to differ during each state. An EEG can also track the waves that are produced when a person is reading, writing, and speaking with others. A particular advantage of the technique is that the participant can move around while the recordings are being taken, which is useful when measuring brain activity in children who often have difficulty keeping still. Furthermore, by following electrical impulses across the surface of the brain, researchers can observe changes over very fast time periods.

Although EEGs can provide information about the general patterns of electrical activity within the brain, and although they allow the researcher to see these changes quickly as they occur in real time, the electrodes must be placed on the surface of the skull, and each electrode measures brain waves from large areas of the brain. As a result, EEGs do not provide a very clear picture of the structure of the brain.

But techniques exist to provide more specific brain images. [Functional](#)



This woman is wearing an EEG cap.
goocy – Research – CC BY-NC 2.0.

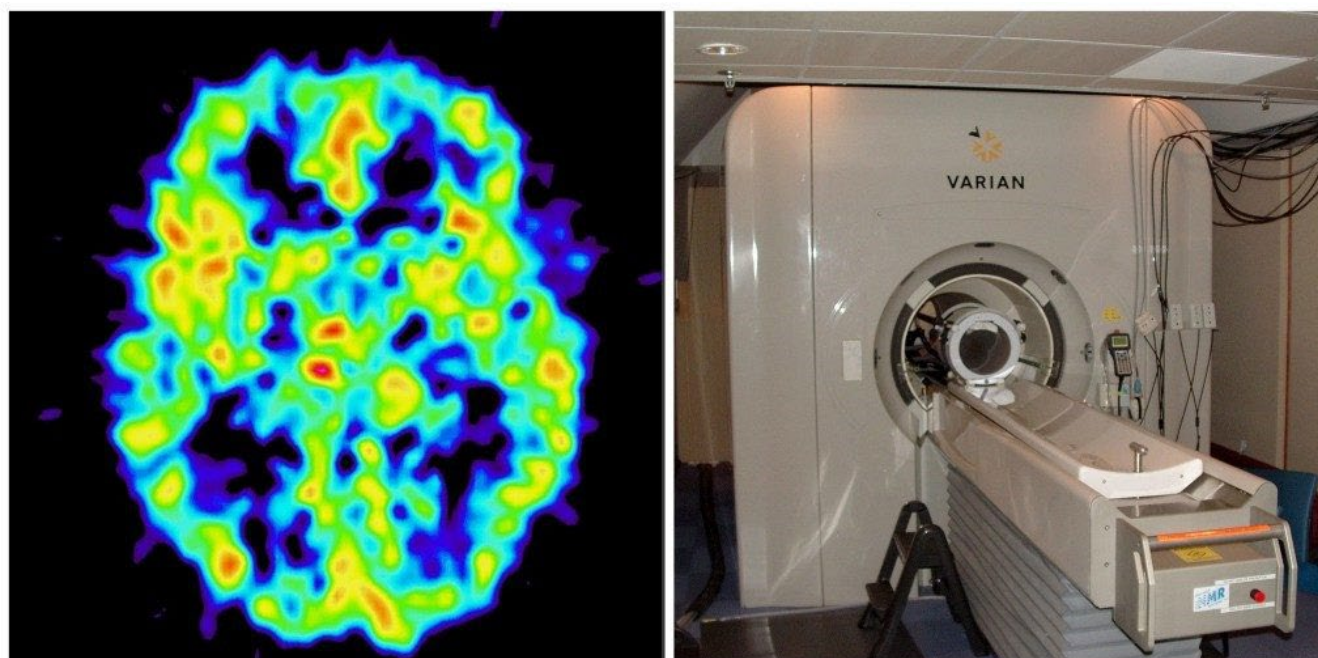
magnetic resonance imaging (fMRI) is a neuroimaging technique that uses a magnetic field to create images of brain structure and function. In research studies that use the fMRI, the research participant lies on a bed within a large cylindrical structure containing a very strong magnet.

Nerve cells in the brain that are active use more oxygen, and the need for oxygen increases blood flow to the area. The fMRI detects the amount of blood flow in each brain region and thus is an indicator of which parts of the brain are active.

Very clear and detailed pictures of brain structures (see Figure 1.5 “Functional Magnetic Resonance Imaging (fMRI)”) can be produced via fMRI. Often, the images take the form of cross-sectional “slices” that are obtained as the magnetic field is passed across the brain. The images of these slices are taken repeatedly and are superimposed on images of the brain structure itself to show how activity changes in different brain structures over time. Normally, the

research participant is asked to engage in tasks while in the scanner, for instance, to make judgments about pictures of people, to solve problems, or to make decisions about appropriate behaviors. The fMRI images show which parts of the brain are associated with which types of tasks. Another advantage of the fMRI is that it is noninvasive. The research participant simply enters the machine and the scans begin.

Figure 1.5 – Functional Magnetic Resonance Imaging (fMRI)



The fMRI creates images of brain structure and activity. In this image, the red and yellow areas represent increased blood flow and thus increased activity.

Reigh LeBlanc – [Reigh's Brain rlwat](#) – CC BY-NC 2.0; [Wikimedia Commons](#) – public domain

Although the scanners themselves are expensive, the advantages of fMRIs are substantial, and scanners are now available in many university and hospital settings. The fMRI is now the most commonly used method of [learning](#) about brain structure, and it has been employed by social psychologists to study [social cognition](#), attitudes, morality, emotions, responses to being rejected by others, and racial [prejudice](#), to name just a few topics (Eisenberger, Lieberman, & Williams, 2003; Greene, Sommerville, Nystrom, Darley, & Cohen, 2001; Lieberman, Hariri, Jarcho, Eisenberger, & Bookheimer, 2005; Ochsner, Bunge, Gross, & Gabrieli, 2002; Richeson et al., 2003).

Observational Research

Once we have decided how to measure our variables, we can begin the process of research itself. As you can see in Table 1.4 “Three Major Research Designs Used by Social Psychologists”, there are three major approaches to conducting research that are used by social psychologists—the *observational approach*, the *correlational approach*, and the *experimental approach*. Each approach has some advantages and disadvantages.

TABLE 1.4 THREE MAJOR RESEARCH DESIGNS USED BY SOCIAL PSYCHOLOGISTS

Research Design	Goal	Advantages	Disadvantages
Observational	To create a snapshot of the current state of affairs.	Provides a relatively complete picture of what is occurring at a given point in time. Allows the development of questions for further study.	Does Not assess relationships between variables.
Correlational	To assess the relationships between two or more variables.	Allows the testing of expected relationships between variables and the making of predictions. Can assess these relationships in everyday life events.	CanNot be used to draw inferences about the causal relationships between the variables.
Experimental	To assess the	Allows the	Cannot

	causal impact of one or more experimental manipulations on a dependent variable.	drawing of conclusions about the causal impact among variables.	experimentally manipulate many important variables. May be expensive and take much time to conduct.
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The most basic research design, [observational research](#), is *research that involves making observations of behavior and recording those observations in an objective manner*. Although it is possible in some cases to use observational data to draw conclusions about the relationships between variables (e.g., by comparing the behaviors of older versus younger children on a playground), in many cases the observational approach is used only to get a picture of what is happening to a given set of people at a given time and how they are responding to the [social situation](#). In these cases, the observational approach involves creating a type of “snapshot” of the current state of affairs.

One advantage of observational research is that in many cases it is the only possible approach to collecting data about the topic of interest. A researcher who is interested in studying the impact of a hurricane on the residents of New Orleans, the reactions of New Yorkers to a terrorist attack, or the activities of the members of a religious cult cannot create such situations in a laboratory but must be ready to make observations in a systematic way when such events occur on their own. Thus observational research allows the study of unique situations that could not be created by the researcher. Another advantage of observational research is that the people whose behavior is being measured are doing the things they do every day, and in some cases they may not even know that their behavior is being recorded.

One early observational study that made an important contribution to understanding human behavior was reported in a book by Leon Festinger and his colleagues (Festinger, Riecken, & Schachter, 1956). The book, called *When Prophecy Fails*, reported an observational study of the members of a

“doomsday” cult. The cult members believed that they had received information, supposedly sent through “automatic writing” from a planet called “Clarion,” that the world was going to end. More specifically, the group members were convinced that the earth would be destroyed, as the result of a gigantic flood, sometime before dawn on December 21, 1954.

When Festinger learned about the cult, he thought that it would be an interesting way to study how individuals in groups communicate with each other to reinforce their extreme beliefs. He and his colleagues observed the members of the cult over a period of several months, beginning in July of the year in which the flood was expected. The researchers collected a variety of behavioral and self-report measures by observing the cult, recording the conversations among the group members, and conducting detailed interviews with them. Festinger and his colleagues also recorded the reactions of the cult members, beginning on December 21, when the world did not end as they had predicted. This observational research provided a wealth of information about the indoctrination patterns of cult members and their reactions to disconfirmed predictions. This research also helped Festinger develop his important theory of [cognitive dissonance](#).

Despite their advantages, observational research designs also have some limitations. Most important, because the data that are collected in observational studies are only a description of the events that are occurring, they do not tell us anything about the relationship between different variables. However, it is exactly this question that [correlational research](#) and experimental research are designed to answer.

The Research Hypothesis

Because social psychologists are generally interested in looking at relationships among variables, they begin by stating their predictions in the form of a precise statement known as a [research hypothesis](#). A research hypothesis is *a statement about the relationship between the variables of interest and about the specific direction of that relationship*. For instance, the research hypothesis

“People who are more similar to each other will be more attracted to each other” predicts that there is a relationship between a variable called similarity and another variable called attraction. In the research hypothesis “The attitudes of cult members become more extreme when their beliefs are challenged,” the variables that are expected to be related are extremity of beliefs and the degree to which the cults’ beliefs are challenged.

Because the research hypothesis states both that there is a relationship between the variables and the direction of that relationship, it is said to be falsifiable. Being falsifiable *means that the outcome of the research can demonstrate empirically either that there is support for the hypothesis (i.e., the relationship between the variables was correctly specified) or that there is actually no relationship between the variables or that the actual relationship is not in the direction that was predicted*. Thus the research hypothesis that “people will be more attracted to others who are similar to them” is falsifiable because the research could show either that there was no relationship between similarity and attraction or that people we see as similar to us are seen as *less* attractive than those who are dissimilar.

Correlational Research

The goal of correlational research is to search for and test hypotheses about the relationships between two or more variables. In the simplest case, the correlation is between only two variables, such as that between similarity and liking, or between gender (male versus female) and helping.

In a correlational design, the research hypothesis is that there is an association (i.e., a correlation) between the variables that are being measured. For instance, many researchers have tested the research hypothesis that a positive correlation exists between the use of violent video games and the incidence of aggressive behavior, such that people who play violent video games more frequently would also display more aggressive behavior.

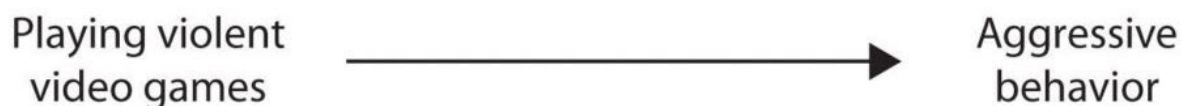


A statistic known as the *Pearson **correlation coefficient*** (symbolized by the letter r) is normally used to summarize the association, or correlation, between two variables. The correlation coefficient can range from -1 (indicating a very strong negative relationship between the variables) to $+1$ (indicating a very strong positive relationship between the variables). Research has found that there is a positive correlation between the use of violent video games and the incidence of aggressive behavior and that the size of the correlation is about $r = .30$ (Bushman & Huesmann, 2010).

One advantage of correlational research designs is that, like observational research (and in comparison with [experimental research designs](#) in which the researcher frequently creates relatively artificial situations in a laboratory setting), they are often used to study people doing the things that they do every day. And correlational research designs also have the advantage of allowing prediction. When two or more variables are correlated, we can use our knowledge of a person's score on one of the variables to predict his or her likely score on another variable. Because high-school grade point averages are correlated with college grade point averages, if we know a person's high-school grade point average, we can predict his or her likely college grade point average. Similarly, if we know how many violent video games a child plays, we can predict how aggressively he or she will behave. These predictions will not be perfect, but they will allow us to make a better guess than we would have been able to if we had not known the person's score on the first variable ahead of time.

Despite their advantages, correlational designs have a very important limitation. This limitation is that they cannot be used to draw conclusions about the causal relationships among the variables that have been measured. An

observed correlation between two variables does Not necessarily indicate that either one of the variables caused the other. Although many studies have found a correlation between the number of violent video games that people play and the amount of aggressive behaviors they engage in, this does not mean that viewing the video games necessarily caused the [aggression](#). Although one possibility is that playing violent games increases aggression,

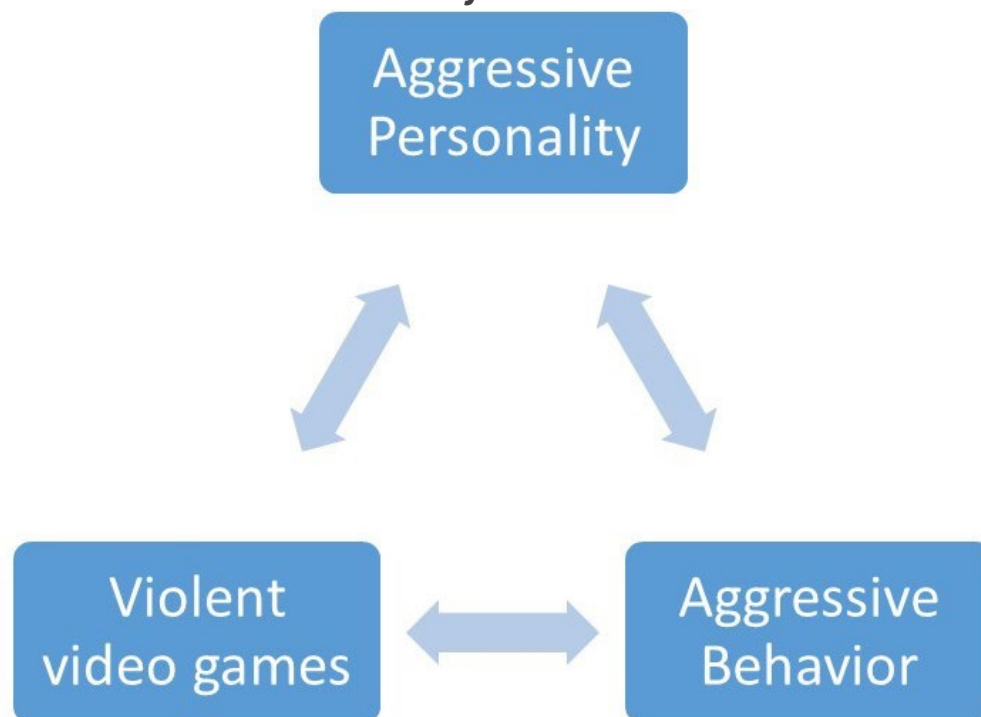


another possibility is that the causal direction is exactly opposite to what has been hypothesized. Perhaps increased aggressiveness causes more interest in, and thus increased viewing of, violent games. Although this causal relationship might not seem as logical to you, there is no way to rule out the possibility of such *reverse causation* on the basis of the observed correlation.



Still another possible explanation for the observed correlation is that it has been produced by the presence of another variable that was not measured in the research. [Common-causal variables](#) (also known as **third variables**) are *variables that are not part of the research hypothesis but that cause both the predictor and the outcome variable and thus produce the observed correlation between them* (Figure 1.6 “Correlation and Non-Causality”). People who have an aggressive personality tend to play more violent video games and engage in more aggressive behavior.

Figure 1.6 – Correlation and Non-Causality



The possibility of common-causal variables must always be taken into account when considering correlational research designs. For instance, in a study that finds a correlation between playing violent video games and aggression, it is possible that a common-causal variable is producing the relationship. Some possibilities include the family background, diet, and gender of the children. Any or all of these potential common-causal variables might be creating the observed correlation between playing violent video games and aggression.

I like to think of common-causal variables in correlational research designs as “mystery” variables, since their presence and identity is usually unknown to the researcher because they have not been measured. Because it is not possible to measure every variable that could possibly cause both variables, it is always possible that there is an unknown common-causal variable. For this reason, we are left with the basic limitation of correlational research: Correlation does not imply causation.

Experimental Research

The goal of much research in social psychology is to understand the causal

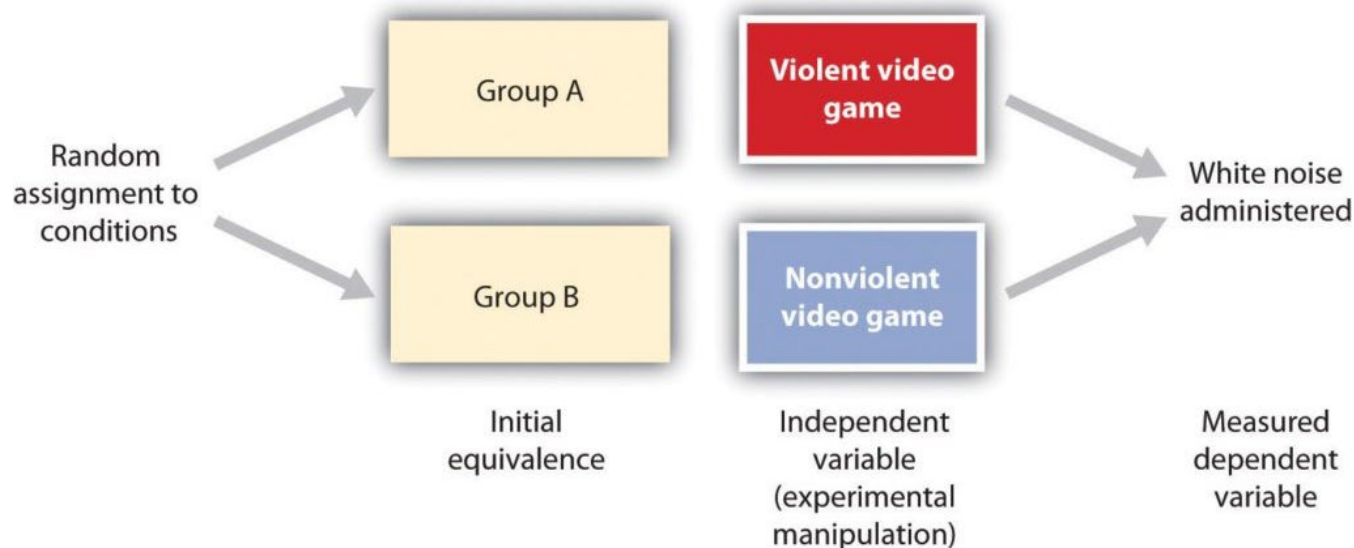
relationships among variables, and for this we use experiments. [Experimental research designs](#) are *research designs that include the manipulation of a given situation or experience for two or more groups of individuals who are initially created to be equivalent, followed by a measurement of the effect of that experience.*

In an experimental research design, the variables of interest are called the independent variables and the dependent variables. The [independent variable](#) refers to *the situation that is created by the experimenter through the experimental manipulations*, and the [dependent variable](#) refers to *the variable that is measured after the manipulations have occurred*. In an experimental research design, the research hypothesis is that the manipulated independent variable (or variables) causes changes in the measured dependent variable (or variables). We can diagram the prediction like this, using an arrow that points in one direction to demonstrate the expected direction of causality:

viewing [violence](#) (independent variable) → aggressive behavior (dependent variable)

Consider an experiment conducted by Anderson and Dill (2000), which was designed to directly test the hypothesis that viewing violent video games would cause increased aggressive behavior. In this research, male and female undergraduates from Iowa State University were given a chance to play either a violent video game (Wolfenstein 3D) or a nonviolent video game (Myst). During the experimental session, the participants played the video game that they had been given for 15 minutes. Then, after the play, they participated in a competitive task with another student in which they had a chance to deliver blasts of white noise through the earphones of their opponent. The operational definition of the dependent variable (aggressive behavior) was the level and duration of noise delivered to the opponent. The design and the results of the experiment are shown in Figure 1.7 “An Experimental Research Design (After Anderson & Dill, 2000)”.

Figure 1.7 – An Experimental Research Design(After Anderson & Dill, 2000)



Two advantages of the experimental research design are (a) an assurance that the independent variable (also known as the experimental manipulation) occurs prior to the measured dependent variable and (b) the creation of **initial equivalence** between the conditions of the experiment (in this case, by using [random assignment to conditions](#)).

Experimental designs have two very nice features. For one, they guarantee that the independent variable occurs prior to measuring the dependent variable. This eliminates the possibility of reverse causation. Second, the experimental manipulation allows ruling out the possibility of common-causal variables that cause both the independent variable and the dependent variable. In experimental designs, the influence of common-causal variables is controlled, and thus eliminated, by creating equivalence among the participants in each of the experimental conditions before the manipulation occurs.

The most common method of creating equivalence among the experimental conditions is through random assignment to conditions, which involves *determining separately for each participant which condition he or she will experience through a random process*, such as drawing numbers out of an envelope. Anderson and Dill first randomly assigned about 100 participants to each of their two groups. Let's call them Group A and Group B. Because they used random assignment to conditions, they could be confident that *before the experimental manipulation occurred*, the students in Group A were, on

average, equivalent to the students in Group B on *every possible variable*, including variables that are likely to be related to aggression, such as family, peers, hormone levels, and diet—and, in fact, everything else.

Then, after they had created initial equivalence, Anderson and Dill created the experimental manipulation—they had the participants in Group A play the violent video game and the participants in Group B the nonviolent video game. Then they compared the dependent variable (the white noise blasts) between the two groups and found that the students who had viewed the violent video game gave significantly longer noise blasts than did the students who had played the nonviolent game. Because they had created initial equivalence between the groups, when the researchers observed differences in the duration of white noise blasts between the two groups after the experimental manipulation, they could draw the conclusion that it was the independent variable (and not some other variable) that caused these differences. The idea is that the *only thing* that was different between the students in the two groups was which video game they had played.

When we create a situation in which the groups of participants are expected to be equivalent before the experiment begins, when we manipulate the independent variable before we measure the dependent variable, and when we change only the nature of independent variables between the conditions, then we can be confident that it is the independent variable that caused the differences in the dependent variable. Such experiments are said to have high [internal validity](#), where internal validity refers to the *confidence with which we can draw conclusions about the causal relationship between the variables*.

Despite the advantage of determining causation, experimental research designs do have limitations. One is that the experiments are usually conducted in lab situations rather than in the everyday lives of people. Therefore, we do not know whether results that we find in a laboratory setting will necessarily hold up in everyday life. To counter this, in some cases *experiments are conducted in everyday settings—for instance, in schools or other organizations*.

Such [field experiments](#) are difficult to conduct because they require a means of creating random assignment to conditions, and this is frequently not possible in natural settings.

A second and perhaps more important limitation of experimental research designs is that some of the most interesting and important social variables canNot be experimentally manipulated. If we want to study the influence of the size of a mob on the destructiveness of its behavior, or to compare the personality characteristics of people who join suicide cults with those of people who do not join suicide cults, these relationships must be assessed using correlational designs because it is simply not possible to manipulate mob size or cult membership.

Factorial Research Designs

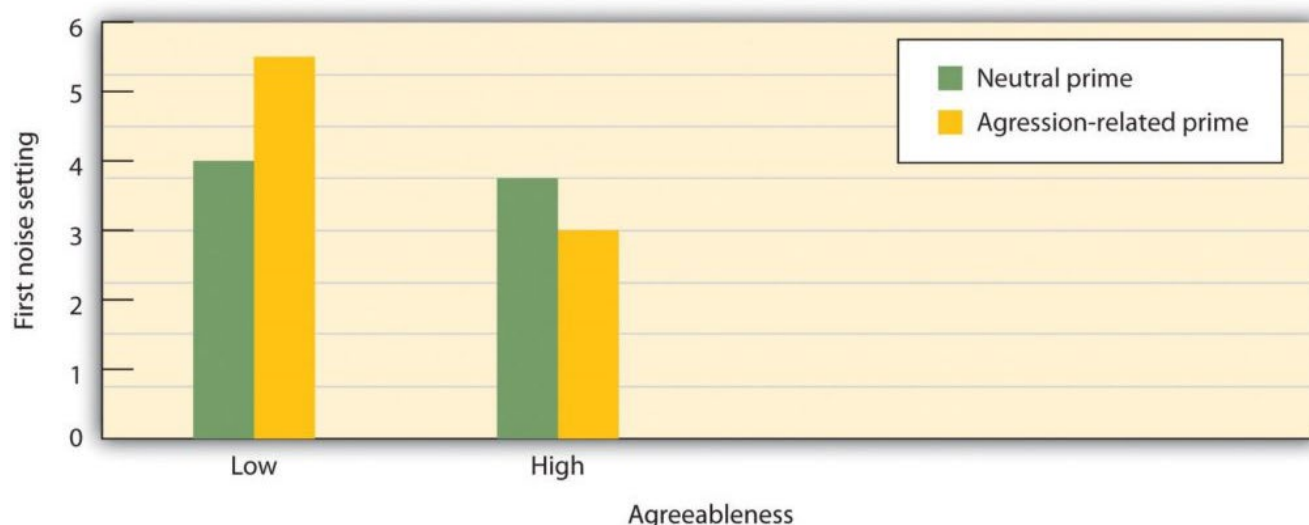
Social psychological experiments are frequently designed to simultaneously study the effects of more than one independent variable on a dependent variable. [Factorial research designs](#) are *experimental designs that have two or more independent variables*. By using a factorial design, the scientist can study the influence of each variable on the dependent variable (known as the *main effects* of the variables) as well as how the variables work together to influence the dependent variable (known as the *interaction* between the variables). Factorial designs sometimes demonstrate the person by situation interaction.

In one such study, Brian Meier and his colleagues (Meier, Robinson, & Wilkowski, 2006) tested the hypothesis that exposure to aggression-related words would increase aggressive responses toward others. Although they did not directly manipulate the social context, they used a technique common in social psychology in which they *primed* (i.e., activated) thoughts relating to social settings. In their research, half of their participants were randomly assigned to see words relating to aggression and the other half were assigned to view neutral words that did not relate to aggression. The participants in the study also completed a measure of individual differences in *agreeableness*—a personality variable that assesses the extent to which the person sees

themselves as compassionate, cooperative, and high on [other-concern](#).

Then the research participants completed a task in which they thought they were competing with another student. Participants were told that they should press the space bar on the computer as soon as they heard a tone over their headphones, and the person who pressed the button the fastest would be the winner of the trial. Before the first trial, participants set the intensity of a blast of white noise that would be delivered to the loser of the trial. The participants could choose an intensity ranging from 0 (no noise) to the most aggressive response (10, or 105 decibels). In essence, participants controlled a “weapon” that could be used to blast the opponent with aversive noise, and this setting became the dependent variable. At this point, the experiment ended.

Figure 1.8 – Person-Situation Interaction



In this experiment by Meier, Robinson, and Wilkowski (2006) the independent variables are type of [priming](#) (aggression or neutral) and participant agreeableness (high or low). The dependent variable is the white noise level selected (a measure of aggression). The participants who were low in agreeableness became significantly more aggressive after seeing aggressive words, but those high in agreeableness did not.

As you can see in Figure 1.8 “**Person-Situation Interaction**”, there was a person by situation interaction. [Priming](#) with aggression-related words (the situational variable) increased the noise levels selected by participants who were low on agreeableness, but priming did not increase aggression (in fact, it decreased it a bit) for students who were high on agreeableness. In this study,

the social situation was important in creating aggression, but it had different effects for different people.

Deception in Social Psychology Experiments

You may have wondered whether the participants in the video game study and that we just discussed were told about the research hypothesis ahead of time. In fact, these experiments both used a cover story—*a false statement of what the research was really about*. The students in the video game study were not told that the study was about the effects of violent video games on aggression, but rather that it was an investigation of how people learn and develop skills at motor tasks like video games and how these skills affect other tasks, such as competitive games. *The participants in the task performance study were not told that the research was about task performance*. In some experiments, the researcher also makes use of an experimental confederate—*a person who is actually part of the experimental team but who pretends to be another participant in the study*. The confederate helps create the right “feel” of the study, making the cover story seem more real.

In many cases, it is not possible in social psychology experiments to tell the research participants about the real hypotheses in the study, and so cover stories or other types of *deception* may be used. You can imagine, for instance, that if a researcher wanted to study racial prejudice, he or she could not simply tell the participants that this was the topic of the research because people may not want to admit that they are prejudiced, even if they really are. Although the participants are always told—through the process of **informed consent**—as much as is possible about the study before the study begins, they may nevertheless sometimes be deceived to some extent. At the end of every research project, however, participants should always receive a complete **debriefing** in which all relevant information is given, including the real hypothesis, the nature of any deception used, and how the data are going to be used.

Interpreting Research

No matter how carefully it is conducted or what type of design is used, all research has limitations. Any given research project is conducted in only one setting and assesses only one or a few dependent variables. And any one study uses only one set of research participants. [Social psychology](#) research is sometimes criticized because it frequently uses college students from Western cultures as participants (Henrich, Heine, & Norenzayan, 2010). But relationships between variables are only really important if they can be expected to be found again when tested using other research designs, other operational definitions of the variables, other participants, and other experimenters, and in other times and settings.

[External validity](#) refers to *the extent to which relationships can be expected to hold up when they are tested again in different ways and for different people*. Science relies primarily upon [replication](#)—that is, *the repeating of research*—to study the [external validity](#) of research findings. Sometimes the original research is replicated exactly, but more often, replications involve using new operational definitions of the independent or dependent variables, or designs in which new conditions or variables are added to the original design. And to test whether a finding is limited to the particular participants used in a given research project, scientists may test the same hypotheses using people from different ages, backgrounds, or cultures. [Replication](#) allows scientists to test the external validity as well as the limitations of research findings.

In some cases, researchers may test their hypotheses, not by conducting their own study, but rather by looking at the results of many existing studies, using a [meta-analysis](#)—*a statistical procedure in which the results of existing studies are combined to determine what conclusions can be drawn on the basis of all the studies considered together*. For instance, in one meta-analysis, Anderson and Bushman (2001) found that across all the studies they could locate that included both children and adults, college students and people who were not in college, and people from a variety of different cultures, there was a clear positive correlation (about $r = .30$) between playing violent video games and

acting aggressively. The summary information gained through a meta-analysis allows researchers to draw even clearer conclusions about the external validity of a research finding.

It is important to realize that the understanding of social behavior that we gain by conducting research is a slow, gradual, and cumulative process. The research findings of one scientist or one experiment do not stand alone—no one study “proves” a theory or a research hypothesis. Rather, research is designed to build on, add to, and expand the existing research that has been conducted by other scientists. That is why whenever a scientist decides to conduct research, he or she first reads journal articles and book chapters describing existing research in the domain and then designs his or her research on the basis of the prior findings. The result of this cumulative process is that over time, research findings are used to create a systematic set of knowledge about social psychology.

Key Takeaways

- Social psychologists study social behavior using an empirical approach. This allows them to discover results that could not have been reliably predicted ahead of time and that may violate our common sense and intuition.
- The variables that form the research hypothesis, known as conceptual variables, are assessed using measured variables by using, for instance, self-report, behavioral, or neuroimaging measures.
- [Observational research](#) is research that involves making observations of behavior and recording those observations in an objective manner. In some cases, it may be the only approach to studying behavior.
- Correlational and experimental research designs are based on developing falsifiable research hypotheses.
- [Correlational research](#) designs allow prediction but canNot be used to conclude cause and effect.
- Experimental research designs in which the independent variable is

manipulated and random assignment is employed can be used to make statements about causality

- Social psychological experiments are frequently [factorial research designs](#) in which the effects of more than one independent variable on a dependent variable are studied.
- All research has limitations, which is why scientists attempt to replicate their results using different measures, populations, and settings and to summarize those results using meta-analyses.

TABLE 1.1 IS SOCIAL PSYCHOLOGY JUST COMMON SENSE?

Statement	Answer	Explanation
Opposites attract.	False	The opposite is more the case. Similarity, particularly in values and beliefs, is an important determinant of liking.
An athlete who wins the bronze medal (third place) in an event is happier about his or her performance than the athlete who wins the silver medal (second place).	True	We frequently compare our actual outcomes with what “might have been.” This leads the silver medalist to compare the possibility of having won the gold, whereas the bronze medalist compares the possibility of having won no medal at all.
Having good friends you can count on can keep you from catching colds.	True	Social support—the perception that we have people we can count on and talk to—provides many positive benefits to

		our mental and physical health.
Subliminal advertising (i.e., persuasive messages that are displayed out of our awareness on TV or movie screens) is very effective in getting us to buy products.	False	Although there is evidence that events that occur out of our awareness can influence our behavior, there is little evidence that subliminal advertising is effective.
The greater the reward promised for an activity, the more one will come to enjoy engaging in that activity.	False	In fact, providing a reward for an activity that is already enjoyed (such as paying a child to get good grades) can undermine a person's enjoyment of the activity.
Physically attractive people are seen as less intelligent than less attractive people.	False	You of course know that this must be false. Why else would you look your very best when you go for a job interview?
Punching a pillow or screaming out loud is a good way to reduce frustration and aggressive tendencies.	False	There is no evidence that engaging in violent behavior can ever reduce the desire to be aggressive. The opposite is much more common. Engaging in aggression leads to more aggression.

People pull harder in a tug-of-war when they're pulling alone than when pulling in a group.	True	Social loafing (reducing our effort because we think that others in the group will make up for us) is more likely.
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Chapter 2: Influencing and Conforming

2.0 Influencing and Conforming

2.1 The Many Varieties of Conformity

2.2 Obedience, Power, and Leadership

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1.0 Introducing Social Psychology

Mass Suicide of 39 Cult Members Shocks Nation

On March 26, 1997, people were found dead in a house on a hilltop in San Diego, California. The people were members of a cult and were part of a carefully orchestrated suicide that involved sedatives, vodka, and plastic bags. There were 21 women and 18 men, and they had come to California from across the country. Most of the victims were in their 40s, but ages ranged from 26 to 72.

The name of the cult was “Heaven’s Gate,” and it also operated a computer web service called “Higher Source.” The victims evidently believed that they were going to meet a UFO hiding behind the comet Hale-Bopp, and the suicides occurred during the time that the comet was closest to earth.

The suicide probably took place over three days and seemed to have been calm and ritualistic. One group of cult members apparently helped some other members die, cleaned up after them, and then went on to take their own doses of poison, which was mixed with apple sauce or pudding. The last two victims had plastic bags over their heads.

“It seemed to be a group decision,” said Dr. Brian Blackbourne, San Diego County medical examiner. “There were different stages, suggesting it was planned. They all had IDs. The house was immaculate. We’re not talking



about a drug-crazed, party-time situation...The drugs were taken for a very specific purpose and that was to take their own lives.”

The victims all wore black pants and black Nike sports shoes, and their faces and chests were covered in purple shrouds. The victims had carefully packed their bags and placed their few possessions at their sides. Most of the victims had a \$5 bill and some quarters in their pockets.

There was no blood found at the scene, and the only weapon in the home was a 9 mm pistol packed in a bag.

Jerry Lipscomb of the San Diego Sheriff's Department told CNN, “What we're finding is that each and every one of the members of the organization, prior to their death, gave a brief statement...The essence of those statements was that they were going to a better place.”

“It's our opinion that it was their intent—they planned to do this.”

Source: Mass suicide involved sedatives, vodka and careful planning.
CNN.com. Retrieved from
<http://edition.cnn.com/US/9703/27/suicide/index.html>.

Social psychology is the scientific study of how we feel, think, and behave toward the people around us and how our feelings, thoughts, and behaviors are influenced by those people. As this definition suggests, the subject matter of social psychology is very broad and can be found in just about everything that we do every day. Social psychologists study why we are often helpful to other people and why we may at other times be unfriendly or aggressive. Social psychologists study both the benefits of having good relationships with other people and the costs of being lonely. Social psychologists study what factors lead people to purchase one product rather than another, how men and women behave differently in social settings, how juries work together to make important group decisions, and what makes some people more likely to recycle and engage in other environmentally friendly behaviors than others. And social

psychologists also study more unusual events, such as how some people can be persuaded that a UFO is hiding behind a comet, leading them to take their own lives as part of a suicide cult.

The **main goal** of this book is to help you learn to think about social behaviors in the same way that social psychologists do. I believe you will find this approach useful because *it will allow you to think about human behavior more critically and more objectively and to gain insight into your own relationships with other people*. Social psychologists study everyday behavior scientifically, and their research creates a useful body of knowledge about our everyday social interactions.

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1.1 Defining Social Psychology: History and Principles

Learning Objectives

1. Define social psychology.
2. Review the history of the field of [social psychology](#) and the topics that social psychologists study.
3. Describe and provide examples of the person-situation interaction.

The History of Social Psychology

The science of social psychology began when scientists first started to systematically and formally measure the thoughts, feelings, and behaviors of human beings (Kruglanski & Stroebe, 2011). The earliest social psychology experiments on group behavior were conducted before 1900 (Triplett, 1898), and the first social psychology textbooks were published in 1908 (McDougall, 1908/2003; Ross, 1908/1974). During the 1940s and 1950s, the social psychologists Kurt Lewin and Leon Festinger refined the experimental approach to studying behavior, creating social psychology as a rigorous scientific discipline. Lewin is sometimes known as “the father of social psychology” because he initially developed many of the important ideas of the discipline, including a focus on the dynamic interactions among people. In 1954, Festinger edited an influential book called *Research Methods in the Behavioral Sciences*, in which he and other social psychologists stressed the need to measure variables and to use laboratory experiments to systematically



test research hypotheses about social behavior. He also noted that it might be necessary in these experiments to deceive the participants about the true nature of the research. [Social psychology](#) was energized by researchers who attempted to understand how the German dictator Adolf Hitler could have produced such extreme obedience and horrendous behaviors in his followers during the Second World War. The studies on [conformity](#) conducted by Muzafir Sherif (1936) and Solomon Asch (1952), as well as those on obedience by Stanley Milgram (1974), showed the importance of conformity pressures in social groups and how people in authority could create obedience, even to the extent of leading people to cause severe harm to others. Philip Zimbardo, in his well-known “prison study” (Haney, Banks, & Zimbardo, 1973), found that ordinary male college students who were recruited to play the roles of guards and prisoners in a simulated prison became so involved in their assignments, and their interaction became so violent, that the study had to be terminated early.

The Stanford prison experiment conducted by Philip Zimbardo in the 1960s demonstrated the powerful role of the [social situation](#) on human behavior. Social psychology quickly expanded to study other topics. John Darley and Bibb Latané (1968) developed a model that helped explain when people do and do not help others in need, and Leonard Berkowitz (1974) pioneered the study of human [aggression](#). Meanwhile, other social psychologists, including Irving Janis (1972), focused on group behavior, studying why intelligent people sometimes made decisions that led to disastrous results when they worked together. Still other social psychologists, including Gordon Allport and Muzafir Sherif, focused on intergroup relations, with the goal of understanding and potentially reducing the occurrence of stereotyping, [prejudice](#), and [discrimination](#). Social psychologists gave their opinions in the 1954 Brown v. Board of Education Supreme Court case that helped end racial segregation in U.S. public schools, and social psychologists still frequently serve as expert witnesses on these and other topics (Fiske, Bersoff, Borgida, Deaux, & Heilman, 1991).

The latter part of the 20th century saw an expansion of social psychology into the field of attitudes, with a particular emphasis on cognitive processes. During

this time, social psychologists developed the first formal models of persuasion, with the goal of understanding how advertisers and other people could present their messages to make them most effective (Eagly & Chaiken, 1993; Hovland, Janis, & Kelley, 1963). These approaches to attitudes focused on the cognitive processes that people use when evaluating messages and on the relationship between attitudes and behavior. Leon Festinger's (1957) important [cognitive dissonance](#) theory was developed during this time and became a model for later research.

In the 1970s and 1980s, social psychology became even more cognitive in orientation as social psychologists used advances in cognitive psychology, which were themselves based largely on advances in computer technology, to inform the field (Fiske & Taylor, 2008). The focus of these researchers, including Alice Eagly, Susan Fiske, E. Tory Higgins, Richard Nisbett, Lee Ross, Shelley Taylor, and many others, was on [social cognition](#)—an understanding of how our knowledge about our social worlds develops through experience and the influence of these knowledge structures on memory, information processing, attitudes, and judgment. Furthermore, the extent to which humans' decision making could be flawed by both cognitive and motivational processes was documented (Kahneman, Slovic, & Tversky, 1982).

In the 21st century, the field of social psychology has been expanding into still other areas. Examples that we will consider in this book include an interest in how social situations influence our health and happiness, the important roles of evolutionary experiences and cultures on our behavior, and the field of [social neuroscience](#)—the study of how our social behavior both influences and is influenced by the activities of our brain (Lieberman, 2010). Social psychologists continue to seek new ways to measure and understand social behavior, and the field continues to evolve. I cannot predict where social psychology will be directed in the future, but I have no doubt that it will still be alive and vibrant.

The Person and the Social Situation

Social psychology is the study of the dynamic relationship between individuals

and the people around them. Each of us is different, and our individual characteristics, including our personality traits, desires, motivations, and emotions, have an important impact on our social behavior. But our behavior is also profoundly influenced by the social situation—the people with whom we interact every day. These people include our friends and family, our fraternity brothers or sorority sisters, our religious groups, the people we see on TV or read about or interact with on the web, as well as people we think about, remember, or even imagine.

Social psychology is largely the study of the social situation. Our social situations create [social influence](#), the process through which other people change our thoughts, feelings, and behaviors and through which we change theirs. Maybe you can already see how the social influence provided by the members of the Heaven's Gate cult was at work in the Hale-Bopp suicide. Kurt Lewin formalized the joint influence of person variables and situational variables, which is known as the person-situation interaction, in an important equation:

Behavior = f (person, social situation).

Lewin's equation indicates that the behavior of a given person at any given time is a function of (depends on) both the characteristics of the person and the influence of the social situation.

The Social Situation Creates Powerful Social Influence

When people are asked to indicate the things that they value the most, they usually mention their social situation—that is, their relationships with other people (Baumeister & Leary, 1995; Fiske & Haslam, 1996). When we work together on a class project, volunteer at a homeless shelter, or serve on a jury in a courtroom trial, we count on others to work with us to get the job done. We develop social bonds with those people, and we expect that they will come

through to help us meet our goals. The importance of others shows up in every aspect of our lives—other people teach us what we should and shouldn't do, what we should and shouldn't think, and even what we should and shouldn't like and dislike.

In addition to the people with whom we are currently interacting, we are influenced by people who are not physically present but who are nevertheless part of our thoughts and feelings. Imagine that you are driving home on a deserted country road late at night. No cars are visible in any direction, and you can see for miles. You come to a stop sign. What do you do? Most likely, you stop at the sign, or at least slow down. You do so because the behavior has been internalized: Even though no one is there to watch you, others are still influencing you—you've learned about the rules and laws of society, what's right and what's wrong, and you tend to obey them. We carry our own personal social situations—our experiences with our parents, teachers, leaders, authorities, and friends—around with us every day.

An important principle of social psychology, one that will be with us throughout this book, is that although individuals' characteristics do matter, the social situation is often a stronger determinant of behavior than is personality. When social psychologists analyze an event such as a cult suicide, they are likely to focus more on the characteristics of the situation (e.g., the strong leader and the group pressure provided by the other group members) than on the characteristics of the cult members themselves. As an example, we will see that even ordinary people who are neither bad nor evil in any way can nevertheless be placed in situations in which an authority figure is able to lead them to engage in evil behaviors, such as applying potentially lethal levels of electrical shock (Milgram, 1974).

In addition to discovering the remarkable extent to which our behavior is influenced by our social situation, social psychologists have discovered that we often do not recognize how important the social situation is in determining behavior. We often wrongly think that we and others act entirely on our own accord, without any external influences. It is tempting to assume that the

people who commit extreme acts, such as terrorists or members of suicide cults, are unusual or extreme people. And yet much research suggests that these behaviors are caused more by the social situation than they are by the characteristics of the individuals and that it is wrong to focus so strongly on explanations of individuals' characteristics (Gilbert & Malone, 1995).

There is perhaps no clearer example of the powerful influence of the social situation than that found in research showing the enormous role that others play in our physical and mental health. [Social support](#) refers to the comfort that we receive from the people around us—for instance, our family, friends, classmates, and coworkers (Diener, Suh, Lucas, & Smith, 1999; Diener, Tamir, & Scollon, 2006).

Social Influence Creates Social Norms

In some cases, social influence occurs rather passively, without any obvious intent of one person to influence the other, such as when we learn about and adopt the beliefs and behaviors of the people around us, often without really being aware that we are doing so. [Social influence](#) occurs when a young child adopts the beliefs and values of his or her parents or when we start liking jazz music, without really being aware of it, because our roommate plays a lot of it. In other cases, social influence is anything but subtle; it involves one or more individuals actively attempting to change the beliefs or behaviors of others, as is evident in the attempts of the members of a jury to get a dissenting member to change his or her opinion, the use of a popular sports figure to encourage children to buy products, or the messages that cult leaders give to their followers to encourage them to engage in the behaviors required of the group.

One outcome of social influence is the development of [social norms](#)—the ways of thinking, feeling, or behaving that are shared by group members and perceived by them as appropriate (Asch, 1955; Cialdini, 1993). Norms include customs, traditions, standards, and rules, as well as the general values of the group. Through norms, we learn what people actually do (“people in the United States are more likely to eat scrambled eggs in the morning and spaghetti in the

evening, rather than vice versa”) and also what we should do (“do unto others as you would have them do unto you”) and shouldn’t do (“do not make racist jokes”). There are norms about almost every possible social behavior, and these norms have a big influence on our actions.

Different Cultures Have Different Norms

The social norms that guide our everyday behaviors and that create social influence derive in large part from our [culture](#). A culture represents a group of people, normally living within a given geographical region, who share a common set of social norms, including religious and family values and moral beliefs (Fiske, Kitayama, Markus, & Nisbett, 1998; Matsumoto, 2001). The culture in which we live affects our thoughts, feelings, and behavior through teaching, imitation, and other forms of social transmission (Mesoudi, 2009). It is not inappropriate to say that our culture defines our lives just as much as our evolutionary experience does.

Cultures differ in terms of the particular norms that they find important and that guide the behavior of the group members. Social psychologists have found that there is a fundamental difference in social norms between Western cultures (including the United States, Canada, Western Europe, Australia, and New Zealand) and East Asian cultures (including China, Japan, Taiwan, Korea, India, and Southeast Asia). Norms in Western cultures are primarily oriented toward [individualism](#)—cultural norms, common in Western societies, that focus primarily on self-enhancement and independence. Children in Western cultures are taught to develop and value a sense of their personal self and to see themselves as largely separate from the people around them. Children in Western cultures feel special about themselves—they enjoy getting gold stars on their projects and the best grade in the class (Markus, Mullally, & Kitayama, 1997). Adults in Western cultures are oriented toward promoting their own individual success, frequently in comparison with (or even at the expense of) others. When asked to describe themselves, individuals in Western cultures generally tend to indicate that they like to “do their own thing,” prefer to live their lives independently, and base their happiness and self-worth upon their

own personal achievements. In short, in Western cultures the emphasis is on self-concern.

Norms in the East Asian cultures, on the other hand, are more focused on other-concern. These norms indicate that people should be more fundamentally connected with others and thus are more oriented toward interdependence, or collectivism. In East Asian cultures, children are taught to focus on developing harmonious social relationships with others, and the predominant norms relate to group togetherness, connectedness, and duty and responsibility to one's family. The members of East Asian cultures, when asked to describe themselves, indicate that they are particularly concerned about the interests of others, including their close friends and their colleagues. As one example of these cultural differences, research conducted by Shinobu Kitayama and his colleagues (Uchida, Norasakkunkit, & Kitayama, 2004) found that East Asians were more likely than Westerners to experience happiness as a result of their connections with other people, whereas Westerners were more likely to experience happiness as a result of their own personal accomplishments. People from Western cultures are, on average, more individualistic than people from Eastern cultures, who are, on average, more collectivistic.

Other researchers have studied other cultural differences, such as variations in orientations toward time. Some cultures are more concerned with arriving and departing according to a fixed schedule, whereas others consider time in a more flexible manner (Levine & Norenzayan, 1999). Levine and colleagues (1999) found that "the pace of life," as assessed by average walking speed in downtown locations and the speed with which postal clerks completed a simple request, was fastest in Western countries (but also including Japan) and slowest in economically undeveloped countries. It has also been argued that there are differences in the extent to which people in different cultures are bound by social norms and customs, rather than being free to express their own individuality without regard to considering social norms (Gelfand et al., 1996). And there are also cultural differences regarding personal space, such as how close individuals stand to each other when talking, as well as differences in the communication styles individuals employ.

It is important to be aware of cultures and cultural differences, at least in part because people with different cultural backgrounds are increasingly coming into contact with each other as a result of increased travel and immigration and the development of the Internet and other forms of communication. In the United States, for instance, there are many different ethnic groups, and the proportion of the population that comes from minority (non-White) groups is increasing from year to year. Minorities will account for a much larger proportion of the total new entries into the U.S. workforce over the next decades. In fact, minorities, which are now roughly one third of the U.S. population, are expected to become the majority by 2042, and the United States is expected to be 54% minority by 2050. By 2023, more than half of all children will be minorities (U.S. Census Bureau, n.d.). These changes will result in considerable growth in cultural diversity in the United States, and although this will create the potential for useful [cooperation](#) and productive interaction, it may also produce unwanted social conflict. Being aware of cultural differences and considering their influence on how we behave toward others is an important part of a basic understanding of social psychology and a topic that we will return to frequently in this book.

Key Takeaways

- The history of social psychology includes the study of attitudes, group behavior, [altruism](#) and aggression, culture, prejudice, and many other topics.
- Social psychologists study real-world problems using a scientific approach.
- Thinking about your own interpersonal interactions from the point of view of social psychology can help you better understand and respond to them.
- Social psychologists study the person-situation interaction: how characteristics of the person and characteristics of the social situation interact to determine behavior.
- Many human social behaviors have been selected by [evolutionary](#)

[adaptation.](#)

- The social situation creates social norms—shared ways of thinking, feeling, and behaving.
- Cultural differences—for instance, in individualistic versus collectivistic orientations—guide our everyday behavior.

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1.2 Conducting Research in ...→

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1.2 Conducting Research in Social Psychology

Learning Objectives

1. Explain why social psychologists rely on empirical methods to study social behavior.
2. Provide examples of how social psychologists measure the variables they are interested in.
3. Review the three types of research designs, and evaluate the strengths and limitations of each type.
4. Consider the role of validity in research, and describe how research programs should be evaluated.

Social psychologists are not the only people interested in understanding and predicting social behavior or the only people who study it. Social behavior is also considered by religious leaders, philosophers, politicians, novelists, and others, and it is a common topic on TV shows. But the social psychological approach to understanding social behavior goes beyond the mere observation of human actions. Social psychologists believe that a true understanding of the causes of social behavior can only be obtained through a systematic scientific approach, and that is why they conduct scientific research. Social psychologists believe that the study of social behavior should be empirical—that is, based on the collection and systematic analysis of observable data.



The Importance of Scientific Research

Because [social psychology](#) concerns the relationships among people, and because we can frequently find answers to questions about human behavior by using our own common sense or intuition, many people think that it is not necessary to study it empirically (Lilienfeld, 2011). But although we do learn about people by observing others and therefore social psychology is in fact partly common sense, social psychology is not entirely common sense.

In case you are not convinced about this, perhaps you would be willing to test whether or not social psychology is just common sense by taking a short true-or-false quiz. If so, please have a look at Table 1.1 “Is [Social Psychology](#) Just Common Sense?” and respond with either “True” or “False.” Based on your past observations of people’s behavior, along with your own common sense, you will likely have answers to each of the questions on the quiz. But how sure are you? Would you be willing to bet that all, or even most, of your answers have been shown to be correct by scientific research? Would you be willing to accept your score on this quiz for your final grade in this class? If you are like most of the students in my classes, you will get at least some of these answers wrong. (To see the answers and a brief description of the scientific research supporting each of these topics, please go to the Chapter Summary at the end of this chapter.)

TABLE 1.1 IS SOCIAL PSYCHOLOGY JUST COMMON SENSE?

Answer each of the following questions, using your own intuition, as either true or false.
Opposites attract.
An athlete who wins the bronze medal (third place) in an event is happier about his or her performance than the athlete who wins the silver medal (second place).
Having good friends you can count on can keep you from catching colds.
Subliminal advertising (i.e., persuasive messages that are displayed out of our awareness on TV or movie screens) is very effective in getting us to buy products.
The greater the reward promised for an activity, the more one will come to

enjoy engaging in that activity.

Physically attractive people are seen as less intelligent than less attractive people.

Punching a pillow or screaming out loud is a good way to reduce frustration and aggressive tendencies.

People pull harder in a tug-of-war when they're pulling alone than when pulling in a group.

One of the reasons we might think that social psychology is common sense is that once we learn about the outcome of a given event (e.g., when we read about the results of a research project), we frequently believe that we would have been able to predict the outcome ahead of time. For instance, if half of a class of students is told that research concerning attraction between people has demonstrated that “opposites attract,” and if the other half is told that research has demonstrated that “birds of a feather flock together,” most of the students in both groups will report believing that the outcome is true and that they would have predicted the outcome before they had heard about it. Of course, both of these contradictory outcomes cannot be true. The problem is that just reading a description of research findings leads us to think of the many cases that we know that support the findings and thus makes them seem believable. The tendency to think that we could have predicted something that we probably would not have been able to predict is called the [hindsight bias](#).

Our common sense also leads us to believe that we know why we engage in the behaviors that we engage in, when in fact we may not. Social psychologist Daniel Wegner and his colleagues have conducted a variety of studies showing that we do not always understand the causes of our own actions. When we think about a behavior before we engage in it, we believe that the thinking guided our behavior, even when it did not (Morewedge, Gray, & Wegner, 2010). People also report that they contribute more to solving a problem when they are led to believe that they have been working harder on it, even though the effort did not increase their contribution to the outcome (Preston & Wegner, 2007). These findings, and many others like them, demonstrate that our beliefs about the

causes of social events, and even of our own actions, do not always match the true causes of those events.

Social psychologists conduct research because it often uncovers results that could not have been predicted ahead of time. Putting our hunches to the test exposes our ideas to scrutiny. The scientific approach brings a lot of surprises, but it also helps us test our explanations about behavior in a rigorous manner. It is important for you to understand the research methods used in psychology so that you can evaluate the validity of the research that you read about here, in other courses, and in your everyday life.

Measuring Affect, Behavior, and Cognition

One important aspect of using an empirical approach to understand social behavior is that the concepts of interest must be measured. For example, if we want to measure hostility, a psychologist could ask people to answer questions about how they react to certain situations. In scientific terms, the characteristics that we are trying to measure are known as conceptual variables (example: hostility), and the particular method that we use to measure a variable of interest is called an operational definition (people's self-reported reactions).

Hostility questionnaire – Which reaction is most likely for you?

1. An elevator takes a long time to arrive where I am waiting.
 - a. I feel annoyed.
 - b. I take the opportunity to relax for a couple of minutes.
2. A driver cuts me off in traffic.
 - A. I am thankful that I avoided an accident.
 - B. I honk my horn and flash my lights.

One approach to measurement involves directly asking people about their

perceptions using [self-report measures](#). [Self-report measures](#) are measures in which individuals are asked to respond to questions posed by an interviewer or on a questionnaire. Generally, because any one question might be misunderstood or answered incorrectly, in order to provide a better measure, more than one question is asked and the responses to the questions are averaged together.

Although it is easy to ask many questions on self-report measures, these measures have a potential disadvantage. As we have seen, people’s insights into their own opinions and their own behaviors may not be perfect, and they might also not want to tell the truth. Therefore, an alternative to self-report that can sometimes provide a more valid measure is to measure behavior itself. Behavioral measures are *measures designed to directly assess what people do*.

TABLE 1.3 EXAMPLES OF OPERATIONAL DEFINITIONS OF [CONCEPTUAL VARIABLES](#) IN SOCIAL PSYCHOLOGICAL RESEARCH

Conceptual variable	Operational definitions
Aggression	Number of presses of a button that administers loud noise to another student
Obedience	Shock level the participant delivers to another person when directed by the experimenter.
Conformity	Giving the wrong answer to simple questions when other people have also given the wrong answer.
Helping	How many people help a person in what appears to be an emergency.;
Prejudice	Number of inches that a person places their chair away from another person

Social Neuroscience: Measuring Social Responses in the Brain

Still another approach to measuring our thoughts and feelings is to measure brain activity, and recent advances in brain science have created a wide variety of new techniques for doing so. One approach, known as [electroencephalography \(EEG\)](#), is a technique that records the electrical activity produced by the brain's neurons through the use of electrodes that are placed around the research participant's head. An electroencephalogram (EEG) can show if a person is asleep, awake, or anesthetized because the brain wave patterns are known to differ during each state. An EEG can also track the waves that are produced when a person is reading, writing, and speaking with others. A particular advantage of the technique is that the participant can move around while the recordings are being taken, which is useful when measuring brain activity in children who often have difficulty keeping still. Furthermore, by following electrical impulses across the surface of the brain, researchers can observe changes over very fast time periods.

Although EEGs can provide information about the general patterns of electrical activity within the brain, and although they allow the researcher to see these changes quickly as they occur in real time, the electrodes must be placed on the surface of the skull, and each electrode measures brain waves from large areas of the brain. As a result, EEGs do not provide a very clear picture of the structure of the brain.

But techniques exist to provide more specific brain images. [Functional](#)



This woman is wearing an EEG cap.
goocy – Research – CC BY-NC 2.0.

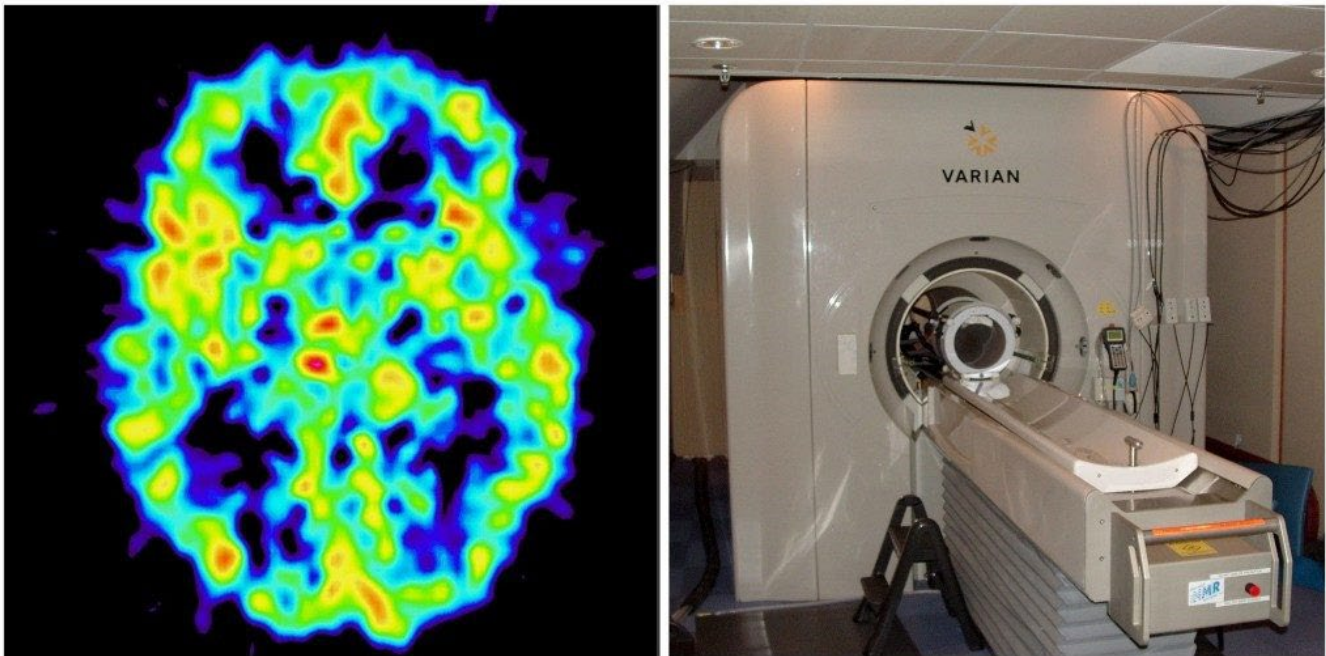
magnetic resonance imaging (fMRI) is a neuroimaging technique that uses a magnetic field to create images of brain structure and function. In research studies that use the fMRI, the research participant lies on a bed within a large cylindrical structure containing a very strong magnet.

Nerve cells in the brain that are active use more oxygen, and the need for oxygen increases blood flow to the area. The fMRI detects the amount of blood flow in each brain region and thus is an indicator of which parts of the brain are active.

Very clear and detailed pictures of brain structures (see Figure 1.5 “Functional Magnetic Resonance Imaging (fMRI)”) can be produced via fMRI. Often, the images take the form of cross-sectional “slices” that are obtained as the magnetic field is passed across the brain. The images of these slices are taken repeatedly and are superimposed on images of the brain structure itself to show how activity changes in different brain structures over time. Normally, the

research participant is asked to engage in tasks while in the scanner, for instance, to make judgments about pictures of people, to solve problems, or to make decisions about appropriate behaviors. The fMRI images show which parts of the brain are associated with which types of tasks. Another advantage of the fMRI is that it is noninvasive. The research participant simply enters the machine and the scans begin.

Figure 1.5 – Functional Magnetic Resonance Imaging (fMRI)



The fMRI creates images of brain structure and activity. In this image, the red and yellow areas represent increased blood flow and thus increased activity.

Reigh LeBlanc – [Reigh's Brain rlwat](#) – CC BY-NC 2.0; [Wikimedia Commons](#) – public domain

Although the scanners themselves are expensive, the advantages of fMRIs are substantial, and scanners are now available in many university and hospital settings. The fMRI is now the most commonly used method of [learning](#) about brain structure, and it has been employed by social psychologists to study [social cognition](#), attitudes, morality, emotions, responses to being rejected by others, and racial [prejudice](#), to name just a few topics (Eisenberger, Lieberman, & Williams, 2003; Greene, Sommerville, Nystrom, Darley, & Cohen, 2001; Lieberman, Hariri, Jarcho, Eisenberger, & Bookheimer, 2005; Ochsner, Bunge, Gross, & Gabrieli, 2002; Richeson et al., 2003).

Observational Research

Once we have decided how to measure our variables, we can begin the process of research itself. As you can see in Table 1.4 “Three Major Research Designs Used by Social Psychologists”, there are three major approaches to conducting research that are used by social psychologists—the *observational approach*, the *correlational approach*, and the *experimental approach*. Each approach has some advantages and disadvantages.

TABLE 1.4 THREE MAJOR RESEARCH DESIGNS USED BY SOCIAL PSYCHOLOGISTS

Research Design	Goal	Advantages	Disadvantages
Observational	To create a snapshot of the current state of affairs.	Provides a relatively complete picture of what is occurring at a given point in time. Allows the development of questions for further study.	Does Not assess relationships between variables.
Correlational	To assess the relationships between two or more variables.	Allows the testing of expected relationships between variables and the making of predictions. Can assess these relationships in everyday life events.	CanNot be used to draw inferences about the causal relationships between the variables.
Experimental	To assess the	Allows the	Cannot

	causal impact of one or more experimental manipulations on a dependent variable.	drawing of conclusions about the causal impact among variables.	experimentally manipulate many important variables. May be expensive and take much time to conduct.
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The most basic research design, [observational research](#), is *research that involves making observations of behavior and recording those observations in an objective manner*. Although it is possible in some cases to use observational data to draw conclusions about the relationships between variables (e.g., by comparing the behaviors of older versus younger children on a playground), in many cases the observational approach is used only to get a picture of what is happening to a given set of people at a given time and how they are responding to the [social situation](#). In these cases, the observational approach involves creating a type of “snapshot” of the current state of affairs.

One advantage of observational research is that in many cases it is the only possible approach to collecting data about the topic of interest. A researcher who is interested in studying the impact of a hurricane on the residents of New Orleans, the reactions of New Yorkers to a terrorist attack, or the activities of the members of a religious cult cannot create such situations in a laboratory but must be ready to make observations in a systematic way when such events occur on their own. Thus observational research allows the study of unique situations that could not be created by the researcher. Another advantage of observational research is that the people whose behavior is being measured are doing the things they do every day, and in some cases they may not even know that their behavior is being recorded.

One early observational study that made an important contribution to understanding human behavior was reported in a book by Leon Festinger and his colleagues (Festinger, Riecken, & Schachter, 1956). The book, called *When Prophecy Fails*, reported an observational study of the members of a

“doomsday” cult. The cult members believed that they had received information, supposedly sent through “automatic writing” from a planet called “Clarion,” that the world was going to end. More specifically, the group members were convinced that the earth would be destroyed, as the result of a gigantic flood, sometime before dawn on December 21, 1954.

When Festinger learned about the cult, he thought that it would be an interesting way to study how individuals in groups communicate with each other to reinforce their extreme beliefs. He and his colleagues observed the members of the cult over a period of several months, beginning in July of the year in which the flood was expected. The researchers collected a variety of behavioral and self-report measures by observing the cult, recording the conversations among the group members, and conducting detailed interviews with them. Festinger and his colleagues also recorded the reactions of the cult members, beginning on December 21, when the world did not end as they had predicted. This observational research provided a wealth of information about the indoctrination patterns of cult members and their reactions to disconfirmed predictions. This research also helped Festinger develop his important theory of [cognitive dissonance](#).

Despite their advantages, observational research designs also have some limitations. Most important, because the data that are collected in observational studies are only a description of the events that are occurring, they do not tell us anything about the relationship between different variables. However, it is exactly this question that [correlational research](#) and experimental research are designed to answer.

The Research Hypothesis

Because social psychologists are generally interested in looking at relationships among variables, they begin by stating their predictions in the form of a precise statement known as a [research hypothesis](#). A research hypothesis is *a statement about the relationship between the variables of interest and about the specific direction of that relationship*. For instance, the research hypothesis

“People who are more similar to each other will be more attracted to each other” predicts that there is a relationship between a variable called similarity and another variable called attraction. In the research hypothesis “The attitudes of cult members become more extreme when their beliefs are challenged,” the variables that are expected to be related are extremity of beliefs and the degree to which the cults’ beliefs are challenged.

Because the research hypothesis states both that there is a relationship between the variables and the direction of that relationship, it is said to be falsifiable. Being falsifiable *means that the outcome of the research can demonstrate empirically either that there is support for the hypothesis (i.e., the relationship between the variables was correctly specified) or that there is actually no relationship between the variables or that the actual relationship is not in the direction that was predicted*. Thus the research hypothesis that “people will be more attracted to others who are similar to them” is falsifiable because the research could show either that there was no relationship between similarity and attraction or that people we see as similar to us are seen as *less* attractive than those who are dissimilar.

Correlational Research

The goal of correlational research is to search for and test hypotheses about the relationships between two or more variables. In the simplest case, the correlation is between only two variables, such as that between similarity and liking, or between gender (male versus female) and helping.

In a correlational design, the research hypothesis is that there is an association (i.e., a correlation) between the variables that are being measured. For instance, many researchers have tested the research hypothesis that a positive correlation exists between the use of violent video games and the incidence of aggressive behavior, such that people who play violent video games more frequently would also display more aggressive behavior.

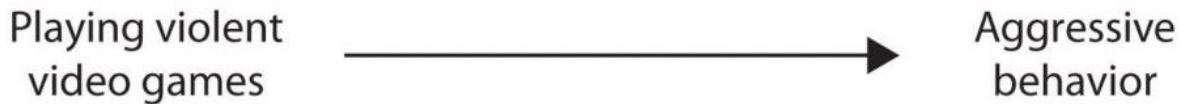


A statistic known as the *Pearson **correlation coefficient*** (symbolized by the letter r) is normally used to summarize the association, or correlation, between two variables. The correlation coefficient can range from -1 (indicating a very strong negative relationship between the variables) to $+1$ (indicating a very strong positive relationship between the variables). Research has found that there is a positive correlation between the use of violent video games and the incidence of aggressive behavior and that the size of the correlation is about $r = .30$ (Bushman & Huesmann, 2010).

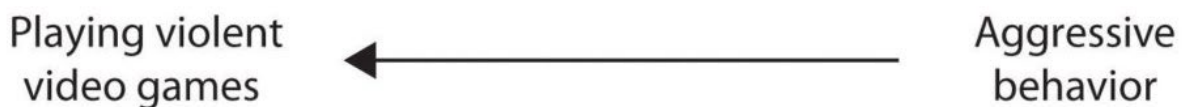
One advantage of correlational research designs is that, like observational research (and in comparison with [experimental research designs](#) in which the researcher frequently creates relatively artificial situations in a laboratory setting), they are often used to study people doing the things that they do every day. And correlational research designs also have the advantage of allowing prediction. When two or more variables are correlated, we can use our knowledge of a person's score on one of the variables to predict his or her likely score on another variable. Because high-school grade point averages are correlated with college grade point averages, if we know a person's high-school grade point average, we can predict his or her likely college grade point average. Similarly, if we know how many violent video games a child plays, we can predict how aggressively he or she will behave. These predictions will not be perfect, but they will allow us to make a better guess than we would have been able to if we had not known the person's score on the first variable ahead of time.

Despite their advantages, correlational designs have a very important limitation. This limitation is that they cannot be used to draw conclusions about the causal relationships among the variables that have been measured. An

observed correlation between two variables does Not necessarily indicate that either one of the variables caused the other. Although many studies have found a correlation between the number of violent video games that people play and the amount of aggressive behaviors they engage in, this does not mean that viewing the video games necessarily caused the [aggression](#). Although one possibility is that playing violent games increases aggression,

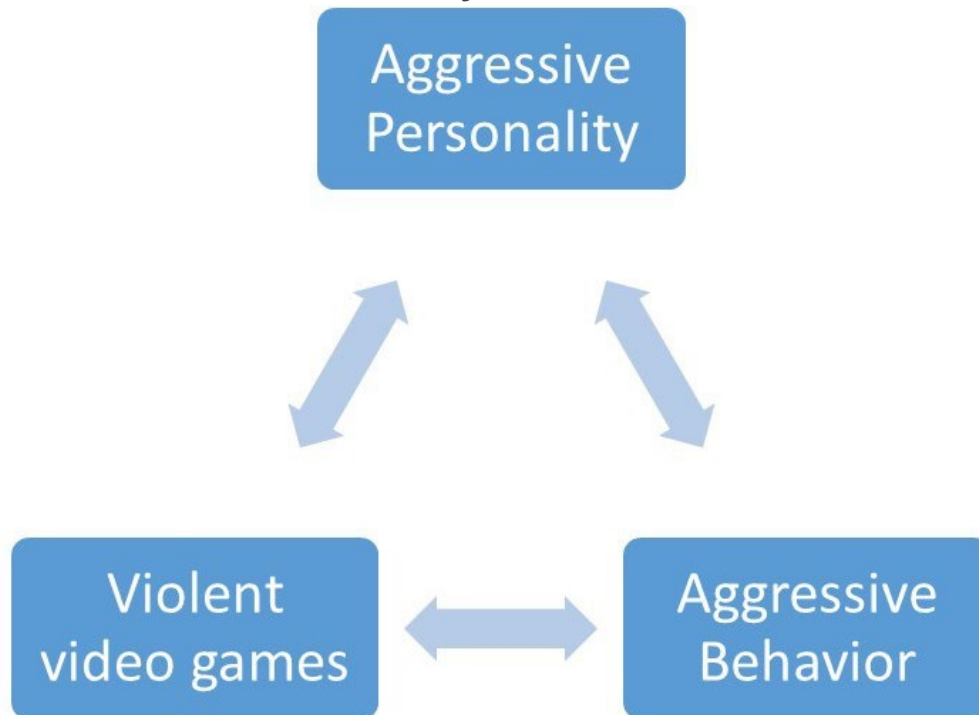


another possibility is that the causal direction is exactly opposite to what has been hypothesized. Perhaps increased aggressiveness causes more interest in, and thus increased viewing of, violent games. Although this causal relationship might not seem as logical to you, there is no way to rule out the possibility of such *reverse causation* on the basis of the observed correlation.



Still another possible explanation for the observed correlation is that it has been produced by the presence of another variable that was not measured in the research. [Common-causal variables](#) (also known as **third variables**) are *variables that are not part of the research hypothesis but that cause both the predictor and the outcome variable and thus produce the observed correlation between them* (Figure 1.6 “Correlation and Non-Causality”). People who have an aggressive personality tend to play more violent video games and engage in more aggressive behavior.

Figure 1.6 – Correlation and Non-Causality



The possibility of common-causal variables must always be taken into account when considering correlational research designs. For instance, in a study that finds a correlation between playing violent video games and aggression, it is possible that a common-causal variable is producing the relationship. Some possibilities include the family background, diet, and gender of the children. Any or all of these potential common-causal variables might be creating the observed correlation between playing violent video games and aggression.

I like to think of common-causal variables in correlational research designs as “mystery” variables, since their presence and identity is usually unknown to the researcher because they have not been measured. Because it is not possible to measure every variable that could possibly cause both variables, it is always possible that there is an unknown common-causal variable. For this reason, we are left with the basic limitation of correlational research: Correlation does not imply causation.

Experimental Research

The goal of much research in social psychology is to understand the causal

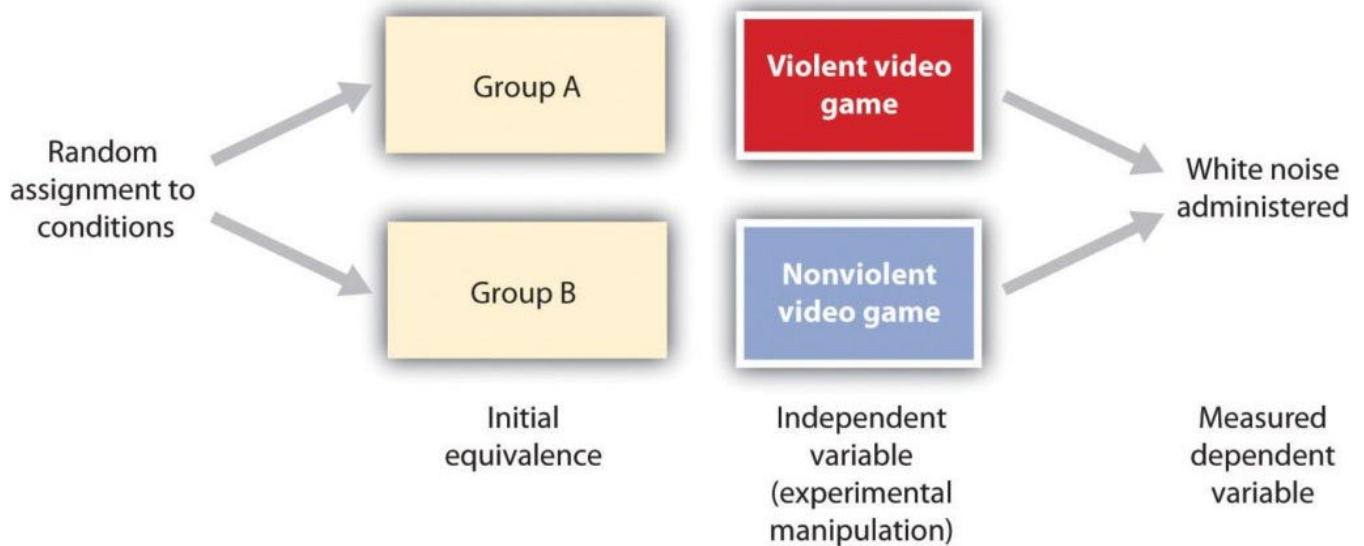
relationships among variables, and for this we use experiments. Experimental research designs are *research designs that include the manipulation of a given situation or experience for two or more groups of individuals who are initially created to be equivalent, followed by a measurement of the effect of that experience.*

In an experimental research design, the variables of interest are called the independent variables and the dependent variables. The independent variable refers to *the situation that is created by the experimenter through the experimental manipulations*, and the dependent variable refers to *the variable that is measured after the manipulations have occurred*. In an experimental research design, the research hypothesis is that the manipulated independent variable (or variables) causes changes in the measured dependent variable (or variables). We can diagram the prediction like this, using an arrow that points in one direction to demonstrate the expected direction of causality:

viewing violence (independent variable) → aggressive behavior (dependent variable)

Consider an experiment conducted by Anderson and Dill (2000), which was designed to directly test the hypothesis that viewing violent video games would cause increased aggressive behavior. In this research, male and female undergraduates from Iowa State University were given a chance to play either a violent video game (Wolfenstein 3D) or a nonviolent video game (Myst). During the experimental session, the participants played the video game that they had been given for 15 minutes. Then, after the play, they participated in a competitive task with another student in which they had a chance to deliver blasts of white noise through the earphones of their opponent. The operational definition of the dependent variable (aggressive behavior) was the level and duration of noise delivered to the opponent. The design and the results of the experiment are shown in Figure 1.7 “An Experimental Research Design (After Anderson & Dill, 2000)”.

Figure 1.7 – An Experimental Research Design(After Anderson & Dill, 2000)



Two advantages of the experimental research design are (a) an assurance that the independent variable (also known as the experimental manipulation) occurs prior to the measured dependent variable and (b) the creation of **initial equivalence** between the conditions of the experiment (in this case, by using [random assignment to conditions](#)).

Experimental designs have two very nice features. For one, they guarantee that the independent variable occurs prior to measuring the dependent variable. This eliminates the possibility of reverse causation. Second, the experimental manipulation allows ruling out the possibility of common-causal variables that cause both the independent variable and the dependent variable. In experimental designs, the influence of common-causal variables is controlled, and thus eliminated, by creating equivalence among the participants in each of the experimental conditions before the manipulation occurs.

The most common method of creating equivalence among the experimental conditions is through random assignment to conditions, which involves *determining separately for each participant which condition he or she will experience through a random process*, such as drawing numbers out of an envelope. Anderson and Dill first randomly assigned about 100 participants to each of their two groups. Let's call them Group A and Group B. Because they used random assignment to conditions, they could be confident that *before the experimental manipulation occurred*, the students in Group A were, on

average, equivalent to the students in Group B on *every possible variable*, including variables that are likely to be related to aggression, such as family, peers, hormone levels, and diet—and, in fact, everything else.

Then, after they had created initial equivalence, Anderson and Dill created the experimental manipulation—they had the participants in Group A play the violent video game and the participants in Group B the nonviolent video game. Then they compared the dependent variable (the white noise blasts) between the two groups and found that the students who had viewed the violent video game gave significantly longer noise blasts than did the students who had played the nonviolent game. Because they had created initial equivalence between the groups, when the researchers observed differences in the duration of white noise blasts between the two groups after the experimental manipulation, they could draw the conclusion that it was the independent variable (and not some other variable) that caused these differences. The idea is that the *only thing* that was different between the students in the two groups was which video game they had played.

When we create a situation in which the groups of participants are expected to be equivalent before the experiment begins, when we manipulate the independent variable before we measure the dependent variable, and when we change only the nature of independent variables between the conditions, then we can be confident that it is the independent variable that caused the differences in the dependent variable. Such experiments are said to have high [internal validity](#), where internal validity refers to the *confidence with which we can draw conclusions about the causal relationship between the variables*.

Despite the advantage of determining causation, experimental research designs do have limitations. One is that the experiments are usually conducted in lab situations rather than in the everyday lives of people. Therefore, we do not know whether results that we find in a laboratory setting will necessarily hold up in everyday life. To counter this, in some cases *experiments are conducted in everyday settings—for instance, in schools or other organizations*.

Such [field experiments](#) are difficult to conduct because they require a means of creating random assignment to conditions, and this is frequently not possible in natural settings.

A second and perhaps more important limitation of experimental research designs is that some of the most interesting and important social variables canNot be experimentally manipulated. If we want to study the influence of the size of a mob on the destructiveness of its behavior, or to compare the personality characteristics of people who join suicide cults with those of people who do not join suicide cults, these relationships must be assessed using correlational designs because it is simply not possible to manipulate mob size or cult membership.

Factorial Research Designs

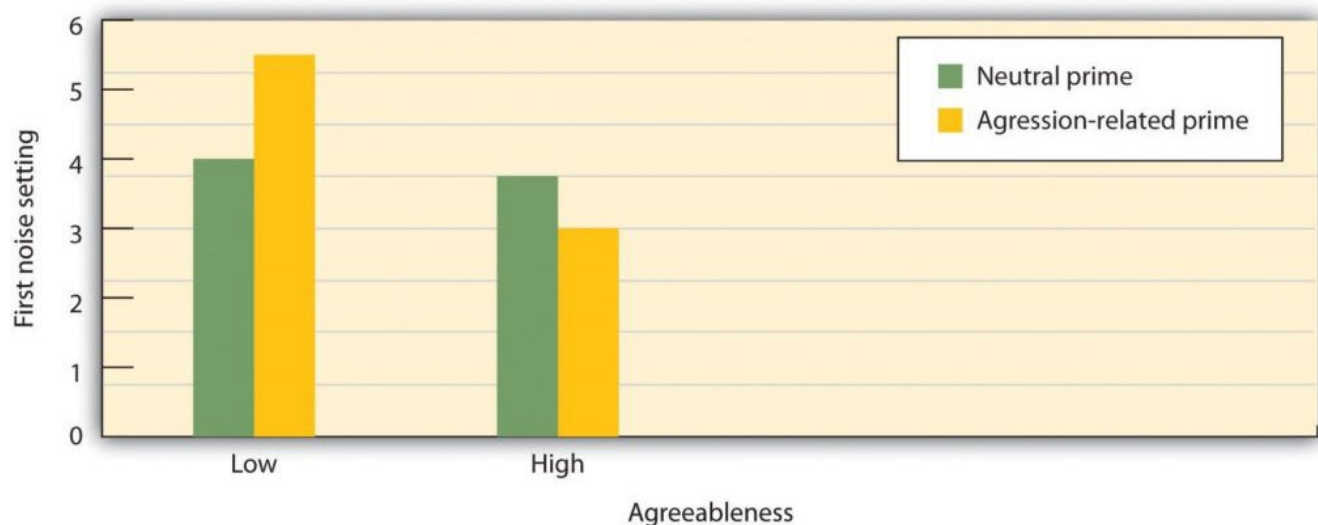
Social psychological experiments are frequently designed to simultaneously study the effects of more than one independent variable on a dependent variable. [Factorial research designs](#) are *experimental designs that have two or more independent variables*. By using a factorial design, the scientist can study the influence of each variable on the dependent variable (known as the *main effects* of the variables) as well as how the variables work together to influence the dependent variable (known as the *interaction* between the variables). Factorial designs sometimes demonstrate the person by situation interaction.

In one such study, Brian Meier and his colleagues (Meier, Robinson, & Wilkowski, 2006) tested the hypothesis that exposure to aggression-related words would increase aggressive responses toward others. Although they did not directly manipulate the social context, they used a technique common in social psychology in which they *primed* (i.e., activated) thoughts relating to social settings. In their research, half of their participants were randomly assigned to see words relating to aggression and the other half were assigned to view neutral words that did not relate to aggression. The participants in the study also completed a measure of individual differences in *agreeableness*—a personality variable that assesses the extent to which the person sees

themselves as compassionate, cooperative, and high on [other-concern](#).

Then the research participants completed a task in which they thought they were competing with another student. Participants were told that they should press the space bar on the computer as soon as they heard a tone over their headphones, and the person who pressed the button the fastest would be the winner of the trial. Before the first trial, participants set the intensity of a blast of white noise that would be delivered to the loser of the trial. The participants could choose an intensity ranging from 0 (no noise) to the most aggressive response (10, or 105 decibels). In essence, participants controlled a “weapon” that could be used to blast the opponent with aversive noise, and this setting became the dependent variable. At this point, the experiment ended.

Figure 1.8 – Person-Situation Interaction



In this experiment by Meier, Robinson, and Wilkowski (2006) the independent variables are type of [priming](#) (aggression or neutral) and participant agreeableness (high or low). The dependent variable is the white noise level selected (a measure of aggression). The participants who were low in agreeableness became significantly more aggressive after seeing aggressive words, but those high in agreeableness did not.

As you can see in Figure 1.8 “**Person-Situation Interaction**”, there was a person by situation interaction. [Priming](#) with aggression-related words (the situational variable) increased the noise levels selected by participants who were low on agreeableness, but priming did not increase aggression (in fact, it decreased it a bit) for students who were high on agreeableness. In this study,

the social situation was important in creating aggression, but it had different effects for different people.

Deception in Social Psychology Experiments

You may have wondered whether the participants in the video game study and that we just discussed were told about the research hypothesis ahead of time. In fact, these experiments both used a cover story—*a false statement of what the research was really about*. The students in the video game study were not told that the study was about the effects of violent video games on aggression, but rather that it was an investigation of how people learn and develop skills at motor tasks like video games and how these skills affect other tasks, such as competitive games. *The participants in the task performance study were not told that the research was about task performance*. In some experiments, the researcher also makes use of an experimental confederate—*a person who is actually part of the experimental team but who pretends to be another participant in the study*. The confederate helps create the right “feel” of the study, making the cover story seem more real.

In many cases, it is not possible in social psychology experiments to tell the research participants about the real hypotheses in the study, and so cover stories or other types of *deception* may be used. You can imagine, for instance, that if a researcher wanted to study racial prejudice, he or she could not simply tell the participants that this was the topic of the research because people may not want to admit that they are prejudiced, even if they really are. Although the participants are always told—through the process of ***informed consent***—as much as is possible about the study before the study begins, they may nevertheless sometimes be deceived to some extent. At the end of every research project, however, participants should always receive a complete ***debriefing*** in which all relevant information is given, including the real hypothesis, the nature of any deception used, and how the data are going to be used.

Interpreting Research

No matter how carefully it is conducted or what type of design is used, all research has limitations. Any given research project is conducted in only one setting and assesses only one or a few dependent variables. And any one study uses only one set of research participants. [Social psychology](#) research is sometimes criticized because it frequently uses college students from Western cultures as participants (Henrich, Heine, & Norenzayan, 2010). But relationships between variables are only really important if they can be expected to be found again when tested using other research designs, other operational definitions of the variables, other participants, and other experimenters, and in other times and settings.

[External validity](#) refers to *the extent to which relationships can be expected to hold up when they are tested again in different ways and for different people*. Science relies primarily upon [replication](#)—that is, *the repeating of research*—to study the [external validity](#) of research findings. Sometimes the original research is replicated exactly, but more often, replications involve using new operational definitions of the independent or dependent variables, or designs in which new conditions or variables are added to the original design. And to test whether a finding is limited to the particular participants used in a given research project, scientists may test the same hypotheses using people from different ages, backgrounds, or cultures. [Replication](#) allows scientists to test the external validity as well as the limitations of research findings.

In some cases, researchers may test their hypotheses, not by conducting their own study, but rather by looking at the results of many existing studies, using a [meta-analysis](#)—*a statistical procedure in which the results of existing studies are combined to determine what conclusions can be drawn on the basis of all the studies considered together*. For instance, in one meta-analysis, Anderson and Bushman (2001) found that across all the studies they could locate that included both children and adults, college students and people who were not in college, and people from a variety of different cultures, there was a clear positive correlation (about $r = .30$) between playing violent video games and

acting aggressively. The summary information gained through a meta-analysis allows researchers to draw even clearer conclusions about the external validity of a research finding.

It is important to realize that the understanding of social behavior that we gain by conducting research is a slow, gradual, and cumulative process. The research findings of one scientist or one experiment do not stand alone—no one study “proves” a theory or a research hypothesis. Rather, research is designed to build on, add to, and expand the existing research that has been conducted by other scientists. That is why whenever a scientist decides to conduct research, he or she first reads journal articles and book chapters describing existing research in the domain and then designs his or her research on the basis of the prior findings. The result of this cumulative process is that over time, research findings are used to create a systematic set of knowledge about social psychology.

Key Takeaways

- Social psychologists study social behavior using an empirical approach. This allows them to discover results that could not have been reliably predicted ahead of time and that may violate our common sense and intuition.
- The variables that form the research hypothesis, known as conceptual variables, are assessed using measured variables by using, for instance, self-report, behavioral, or neuroimaging measures.
- [Observational research](#) is research that involves making observations of behavior and recording those observations in an objective manner. In some cases, it may be the only approach to studying behavior.
- Correlational and experimental research designs are based on developing falsifiable research hypotheses.
- [Correlational research](#) designs allow prediction but canNot be used to conclude cause and effect.
- Experimental research designs in which the independent variable is

manipulated and random assignment is employed can be used to make statements about causality

- Social psychological experiments are frequently [factorial research designs](#) in which the effects of more than one independent variable on a dependent variable are studied.
- All research has limitations, which is why scientists attempt to replicate their results using different measures, populations, and settings and to summarize those results using meta-analyses.

TABLE 1.1 IS SOCIAL PSYCHOLOGY JUST COMMON SENSE?

Statement	Answer	Explanation
Opposites attract.	False	The opposite is more the case. Similarity, particularly in values and beliefs, is an important determinant of liking.
An athlete who wins the bronze medal (third place) in an event is happier about his or her performance than the athlete who wins the silver medal (second place).	True	We frequently compare our actual outcomes with what “might have been.” This leads the silver medalist to compare the possibility of having won the gold, whereas the bronze medalist compares the possibility of having won no medal at all.
Having good friends you can count on can keep you from catching colds.	True	Social support—the perception that we have people we can count on and talk to—provides many positive benefits to

		our mental and physical health.
Subliminal advertising (i.e., persuasive messages that are displayed out of our awareness on TV or movie screens) is very effective in getting us to buy products.	False	Although there is evidence that events that occur out of our awareness can influence our behavior, there is little evidence that subliminal advertising is effective.
The greater the reward promised for an activity, the more one will come to enjoy engaging in that activity.	False	In fact, providing a reward for an activity that is already enjoyed (such as paying a child to get good grades) can undermine a person's enjoyment of the activity.
Physically attractive people are seen as less intelligent than less attractive people.	False	You of course know that this must be false. Why else would you look your very best when you go for a job interview?
Punching a pillow or screaming out loud is a good way to reduce frustration and aggressive tendencies.	False	There is no evidence that engaging in violent behavior can ever reduce the desire to be aggressive. The opposite is much more common. Engaging in aggression leads to more aggression.

People pull harder in a tug-of-war when they're pulling alone than when pulling in a group.	True	Social loafing (reducing our effort because we think that others in the group will make up for us) is more likely.
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Chapter 2: Influencing and Conforming

2.0 Influencing and Conforming

2.1 The Many Varieties of Conformity

2.2 Obedience, Power, and Leadership

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2.0 Influencing and Conforming

Death by Alcohol

Sam Spady had it all. During her high school years she was not only homecoming queen but also an honor student, as well as class president. As a 19-year-old college student at Colorado State University, Spady had many dreams for her future, all of which never materialized, as she died on September 5, 2004, after hours of binge drinking.

Spady, who was celebrating with friends at the school's biggest social event, consumed over 30 alcoholic beverages over a period of 11 hours and was then left at a fraternity house to sleep it off. Another student and fraternity member later discovered her body while showing his mother the house.

An estimated 1,400 college students between the ages of 18 and 24 die from alcohol-related incidents each year, according to the National Institute of Alcohol Abuse and Alcoholism.

Unfortunately, things have not changed since Spady's death. People still feel as though they're invincible and bars are enticing students to drink by offering alcohol at inexpensive prices.

Sources: http://www.usatoday.com/news/health/2006-06-26-spady-binge-drinking_x.htm; <http://www.samspadyfoundation.org/press.html>



Have you ever decided what courses to take by asking for advice from your friends or by observing what courses they were choosing? Have you picked the clothes to wear to a party based on what your friends were wearing? Can you think of a time when you changed your beliefs or behaviors because a person in authority, such as a teacher or a religious or political leader, gave you ideas about new ways to think or new things to do? Or perhaps you started smoking cigarettes or drinking alcohol, even though you didn't really want to, because some of your friends were doing it.

Your answers to at least some of these questions will be yes because you, like all people, are influenced by those around you. When you find yourself in situations like these, you are experiencing what is perhaps the most basic of all social psychological processes—[social influence](#), defined as the influence of other people on our everyday thoughts, feelings, and behavior (Hogg, 2010).

This chapter focuses on the social influence that leads individuals, sometimes against their will, to adopt and adhere to the opinions and behaviors of others. The outcome of this social influence, known as [conformity](#), refers to the change in beliefs, opinions, and behaviors as a result of our perceptions about what other people believe or do. We conform to social influence in part to meet cognitive goals of forming accurate knowledge about the world around us, for instance, by using the opinions and recommendations of others to help us make better decisions. But conformity also involves affective processes. Because we want to be liked and accepted by others, we may sometimes behave in ways that we might not really have wanted to if we had thought about them more carefully. As an example, we may we engage in unhealthy behaviors, such as smoking or alcohol abuse, simply because our friends are engaging in them.

There are many types of conformity, ranging from the simple and unconscious imitation of the other people around us to the obedience created by powerful people who have direct control over us. In this chapter we will consider both conformity and leadership, which is the ability to direct or inspire others to achieve goals. We'll look at the potential benefits of conforming to others but also consider the costs of doing so. And we will also consider which people are

most likely to conform.

Although conformity sounds like it might be a negative thing (and in some cases it is), overall the tendency to be influenced by the actions of others is an important human adaptation. Just as birds conform to the movements of those around them when they fly together in a flock, social influence among humans probably increases our [fitness](#) by helping us live and work well together (Coultas, 2004; Fincher, Thornhill, Murray, & Schaller, 2008; Henrich & Boyd, 1998; Kessler & Cohrs, 2008). [Conformity](#) is determined by the person-situation interaction, and although the situation is extremely powerful, different people are more or less likely to conform.

Important

As you read this chapter, keep in mind that conformity is another example of the ongoing interactive dynamic feedback loop among people. Just as you are conforming to the influence that others have on you, your behavior is also influencing those others to conform to your beliefs and opinions. You may be surprised by how often these influences are occurring around you.

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2.1 The Many Varieties of Conformity

Learning Objectives

1. Describe some of the active and passive ways that conformity occurs in our everyday lives.
2. Compare and contrast informational conformity and normative conformity.
3. Summarize the variables that create majority and minority social influence.
4. Outline the situational variables that influence the extent to which we conform.

The typical outcome of [social influence](#) is that our beliefs and behaviors become more similar to those of others around us. At times this change occurs in a spontaneous and automatic sense, without any obvious intent of one person to change the other. Perhaps you learned to like jazz or rap music because your roommate was playing a lot of it. You didn't really want to like the music, and your roommate didn't force it on you—your preferences changed in passive way. Robert Cialdini and his colleagues (Cialdini, Reno, & Kallgren, 1990) found that college students were more likely to throw litter on the ground when they had just seen another person throw some paper on the ground and were least likely to litter when they had just seen another person pick up and throw paper into a trash can. The researchers interpreted this as a kind of spontaneous [conformity](#)—a tendency to follow the behavior of others, often entirely out of our awareness. Even our emotional states become more similar



to those we spend more time with (Anderson, Keltner, & John, 2003).

Research Focus: Imitation as Subtle Conformity

Perhaps you have noticed in your own behavior a type of very subtle conformity—the tendency to imitate other people who are around you. Have you ever found yourself talking, smiling, or frowning in the same way that a friend does? Tanya Chartrand and John Bargh (1999) investigated whether the tendency to imitate others would occur even for strangers, and even in very short periods of time.

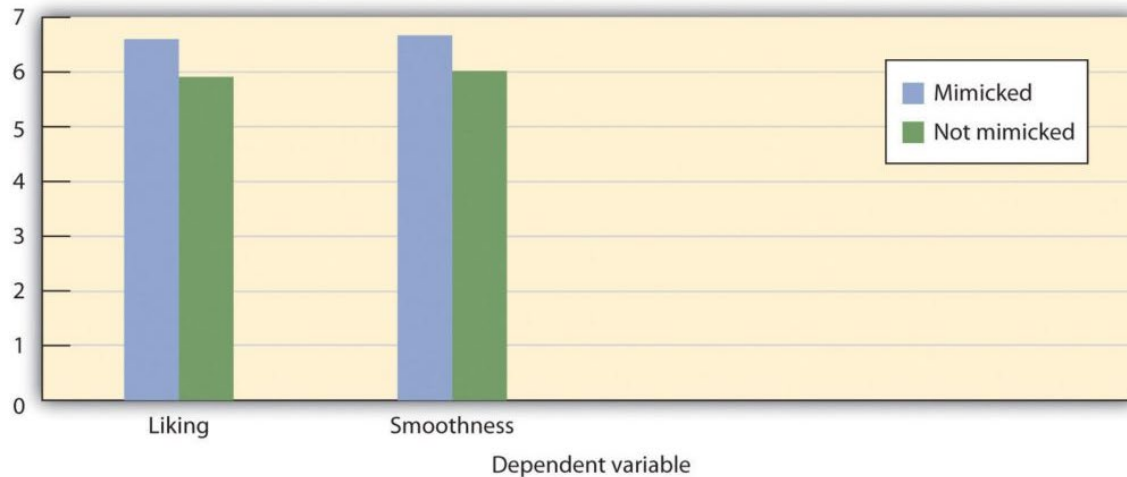
In their first experiment, students worked on a task with another student, who was actually an [experimental confederate](#). The two worked together to discuss photographs taken from current magazines. While they were working together, the confederate engaged in some unusual behaviors to see if the research participant would mimic them. Specifically, the confederate either rubbed his or her face or shook his or her foot. It turned out that the students did mimic the behavior of the confederate, by themselves either rubbing their own faces or shaking their own feet. And when the experimenters asked the participants if they had noticed anything unusual about the behavior of the other person during the experiment, none of them indicated awareness of any face rubbing or foot shaking.

It is said that imitation is a form of flattery, and we might therefore expect that we would like people who imitate us. Indeed, in a second experiment, Chartrand and Bargh found exactly this. Rather than creating the behavior to be mimicked, in this study the confederate imitated the behaviors of the participant. While the participant and the confederate discussed the magazine photos, the confederate mirrored the posture, movements, and mannerisms displayed by the

participant.

As you can see in the following figure, the participants who had been mimicked liked the other person more and indicated that they thought the interaction had gone more smoothly, in comparison with the participants who had not been imitated.

Figure 2.1



Participants who had been mimicked indicated that they liked the person who had imitated them more and that the interaction with that person had gone more smoothly, in comparison with participants who had not been mimicked. Data are from Chartrand and Bargh (1999).

Imitation is an important part of social interaction. We easily and frequently mimic others without being aware that we are doing so. We may communicate to others that we agree with their viewpoints by mimicking their behaviors, and we tend to get along better with people with whom we are well “coordinated.” We even expect people to mimic us in social interactions, and we become distressed when they do not (Dalton, Chartrand, & Finkel, 2010). This unconscious conformity may help explain why we hit it off immediately with some people and never get it together with others (Chartrand & Dalton, 2009; Tickle-Degnen & Rosenthal, 1990, 1992).

Informational Conformity: Conforming to Be Accurate

Although mimicry represents the more subtle side, conformity also occurs in a more active and thoughtful sense, for instance, when we actively look to our friends' opinions to determine appropriate behavior, when a car salesperson attempts to make a sale, or even when a powerful dictator uses [physical aggression](#) to force the people in his country to engage in the behaviors that he desires. In these cases, the influence is obvious. We know we are being influenced and we may attempt—sometimes successfully, and sometimes less so—to counteract the pressure.

Influence sometimes occurs because we believe that other people have valid knowledge about an opinion or issue, and we use that information to help us make good decisions. When we take our winter coat to school because the weatherman says it's going to be cold, this is because we think that the weatherman has some good information that we can use. [Informational conformity](#) is the change in opinions or behavior that occurs when we conform to people whom we believe have accurate information. We base our beliefs on those presented to us by reporters, scientists, doctors, and lawyers because we believe they have more expertise in certain fields than we have. But we also use our friends and colleagues for information; when we choose a prom gown on the basis of our friends' advice about what looks good on us, we are using [informational conformity](#)—we believe that our friends have good judgment about the things that matter to us.

Informational conformity is often the end result of social comparison, the process of comparing our opinions with those of others to gain an accurate appraisal of the validity of an opinion or behavior (Festinger, Schachter, & Back, 1950; Hardin & Higgins, 1996; Turner, 1991). Informational conformity tends to lead to real, long-lasting, changes in beliefs. The result of informational influence is normally [private acceptance](#): real change in opinions on the part of the individual. We believe that taking the winter coat was the right thing to do

and that the prom gown really looks good on us.

Normative Conformity: Conforming to Be Liked and to Avoid Rejection

In other cases we conform not because we want to have valid knowledge but rather to meet the goal of belonging to and being accepted by a group that we care about (Deutsch & Gerard, 1955). When we start smoking cigarettes or buy shoes that we cannot really afford in order to impress others, we do these things not so much because we think they are the right things to do but rather because we want to be liked.

Normative conformity occurs when we express opinions or behave in ways that help us to be accepted or that keep us from being isolated or rejected by others. When we engage in normative conformity we conform to social norms — socially accepted beliefs about what we do or should do in particular social contexts (Cialdini, 1993; Sherif, 1936; Sumner, 1906).

In contrast to informational conformity, in which the attitudes or opinions of the individual change to match that of the influencers, the outcome of normative conformity is often public conformity (rather than private acceptance). Public conformity is a superficial change in behavior (including the public expression of opinions) that is not accompanied by an actual change in one's private opinion.

Conformity may appear in our public behavior even though we may believe something completely different in private. We may obey the speed limit or wear a uniform to our job (behavior) to conform to social norms and requirements, even though we may not necessarily believe that it is appropriate to do so (opinion). We may use drugs with our friends without really wanting to, and without believing it is really right, because our friends are all using drugs.

However, behaviors that are originally performed out of a desire to be accepted

(normative conformity) may produce changes in beliefs to match them, and the result becomes private acceptance. Perhaps you know someone who started smoking to please his friends but soon convinced himself that it was an acceptable thing to do.

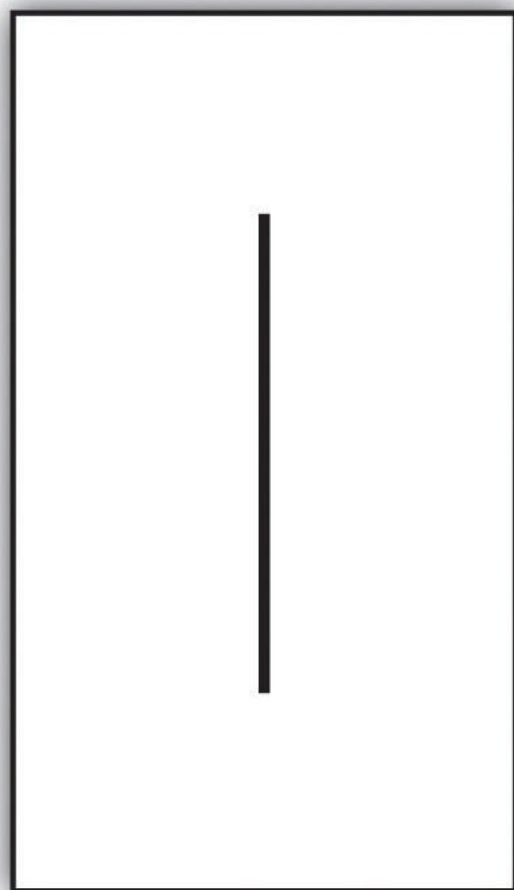
Although in some cases conformity may be purely informational or purely normative, in most cases the goals of being accurate and being accepted go hand-in-hand, and therefore both informational and normative conformity often occur at the same time. When soldiers obey their commanding officers, they probably do it both because others are doing it (normative conformity) and because they think it is the right thing to do (informational conformity). It has been argued that the distinction between informational and normative conformity is more apparent than real and that it may not be possible to fully differentiate them (Turner, 1991).

Majority Influence: Conforming to the Group

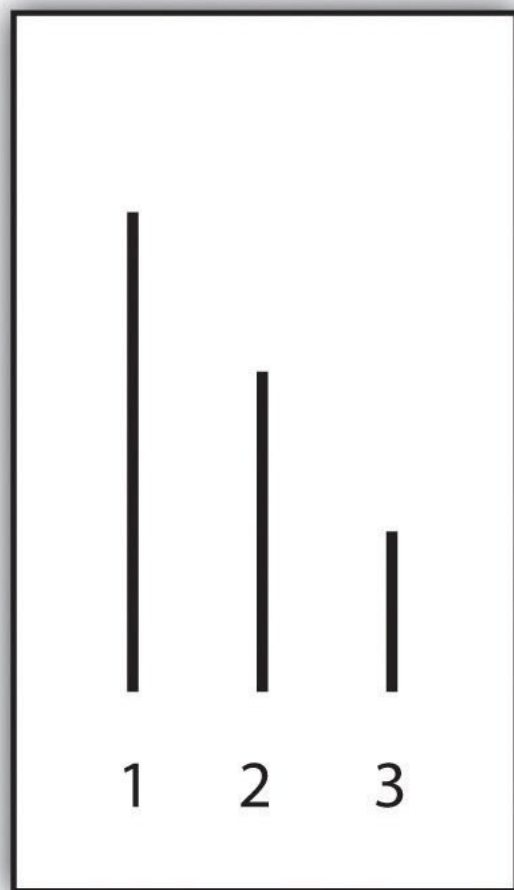
Although conformity occurs whenever group members change their opinions or behaviors as a result of their perceptions of others, we can divide such influence into two types. [Majority influence](#) occurs when the beliefs held by the larger number of individuals in the current social group prevail. In contrast, [minority influence](#) occurs when the beliefs held by the smaller number of individuals in the current social group prevail. Not surprisingly, [majority influence](#) is more common, and we will consider it first.

Solomon Asch (1952, 1955) conducted studies in which the correct answers to judgments were entirely unambiguous. In these studies, the research participants were male college students who were told that they were to be participating in a test of visual abilities. The men were seated in a small semicircle in front of a board that displayed the visual stimuli that they were going to judge. The men were told that there would be 18 trials during the experiment, and on each trial they would see two cards. The standard card had

a single line that was to be judged. And the test card had three lines that varied in length between about 2 and 10 inches:



Standard card



Test card

The men's task was simply to indicate which line on the test card was the same length as the line on the standard card. As you can see from the Asch card sample above, there is no question that correct answer is line 1. In fact, Asch found that people made virtually no errors on the task when they made their judgments alone.

On each trial, each person answered out loud, beginning with one end of the semicircle and moving to the other end. Although the participant did not know it, the other group members were not true participants but experimental confederates who gave predetermined answers on each trial. Because the participant was seated next to last in the row, he always made his judgment

after most of the other group members made theirs. Although on the first two trials the confederates each gave the correct answer, on the third trial, and on 11 of the subsequent trials, they all had been instructed to give the same incorrect answer. For instance, even though the correct answer was Line 1, they would all say it was Line 2. Thus when it became the participant's turn to answer, he could either give the clearly correct answer or conform to the incorrect responses of the confederates.

Asch found that about 76% of the 123 men who were tested gave at least one incorrect response when it was their turn, and 37% of the responses, overall, were conforming. This is indeed evidence for the power of conformity because the research participants were giving clearly incorrect answers out loud. However, conformity was not absolute—in addition to the 24% of the men who never conformed, only 5% of the men conformed on all 12 of the critical trials.

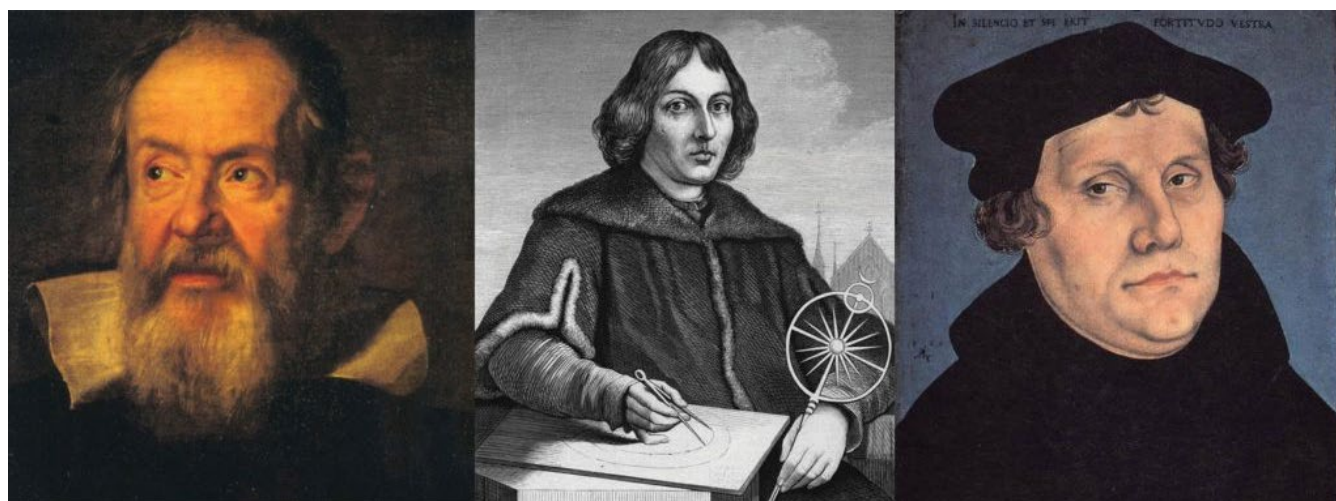
You might think that Asch's study shows primarily normative conformity, in the sense that the participants gave the wrong answer not because they thought it was correct but because they wanted to avoid being seen as different. But is it not possible that the participants were also a bit unsure of the correct answer? When I look at the picture of one of the participants in Asch's studies, it looks to me like he is really unsure about what he is seeing. Perhaps, then, even in Asch's study some informational influence is occurring. Maybe the participants became unsure of their responses and used the opinions of others to help them determine what was correct. Normative and informational conformity often operate together.

Minority Influence: Resisting Group Pressure

The research that we have discussed to this point involves conformity in which the opinions and behaviors of individuals become more similar to the opinions and behaviors of the majority of the people in the group—majority influence. But we do not always blindly conform to the beliefs of the majority. Although

more unusual, there are nevertheless cases in which a smaller number of individuals are able to influence the opinions or behaviors of the group—this is minority influence.

It is a good thing that minorities can be influential; otherwise, the world would be pretty boring. When we look back on history we find that it is the unusual, divergent, innovative minority groups or individuals, who—although frequently ridiculed at the time for their unusual ideas—end up being respected for producing positive changes. The work of scientists, religious leaders, philosophers, writers, musicians, and artists who go against group norms by expressing new and unusual ideas frequently is not liked at first. These novel thinkers may be punished—in some cases even killed—for their beliefs. In the end, however, if the ideas are interesting and important, the majority may conform to these new ideas, producing social change. In short, although conformity to majority opinions is essential to provide a smoothly working society, if individuals only conformed to others there would be few new ideas and little social change.



Galileo, Copernicus, and Martin Luther were people who did not conform to the opinions and behaviors of those around them. In the end their innovative ideas changed the thinking of the masses.

Source: Images courtesy of Wikimedia: [Copernicus](#), [Galileo](#), and [Martin Luther](#)

The French social psychologist Serge Moscovici was particularly interested in the situations under which minority influence might occur. In fact, he argued that all members of all groups are able, at least in some degree, to influence

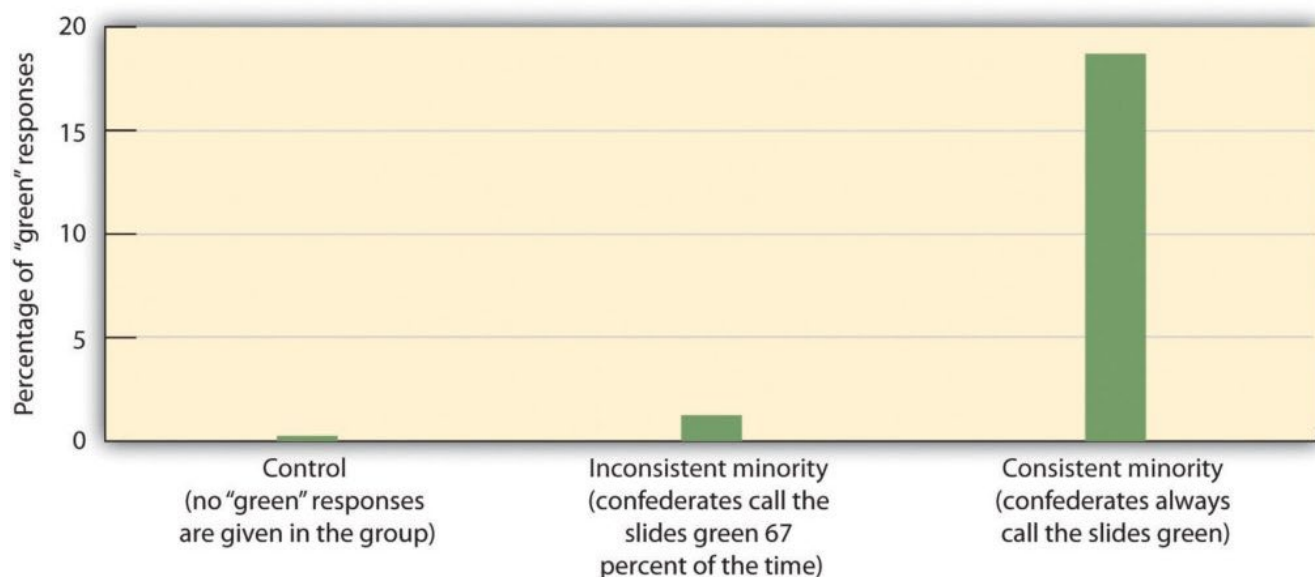
others, regardless of whether they are in the majority or the minority. To test whether minority group members could indeed produce influence, he and his colleagues (Moscovici, Lage, & Naffrechoux, 1969) created the opposite of Asch's line perception study, such that there was now a minority of confederates in the group (two) and a majority of experimental participants (four). All six individuals viewed a series of slides depicting colors, supposedly as a study of color perception, and as in Asch's research, each voiced out loud an opinion about the color of the slide.

Although the color of the slides varied in brightness, they were all clearly blue. Moreover, demonstrating that the slides were unambiguous, just as the line judgments of Asch had been, participants who were asked to make their judgments alone called the slides a different color than blue less than 1% of the time. (When it happened, they called the slides green.)

In the experiment, the two confederates had been instructed to give one of two patterns of answers that were different from the normal responses. In the *consistent-minority* condition, the two confederates gave the unusual response (green) on every trial. In the *inconsistent-minority* condition the confederates called the slides "green" on two thirds of their responses and called them blue on the other third.

The minority of two was able to change the beliefs of the majority of four, but only when they were unanimous in their judgments. As shown in Figure 2.4 "The Power of Consistent Minorities", Moscovici found that the presence of a minority who gave consistently unusual responses influenced the judgments made by the experimental participants. When the minority was consistent, 32% of the majority group participants said green at least once and 18% of the responses of the majority group were green. However, as you can see in Figure 2.4 "The Power of Consistent Minorities", the inconsistent minority had virtually no influence on the judgments of the majority.

Figure 2.4 – The Power of Consistent Minorities



In the studies of minority influence by Serge Moscovici, only a consistent minority (in which each individual gave the same incorrect response) was able to produce conformity in the majority participants. Data are from Moscovici, Lage, and Naffrechoux (1969).

On the basis of this research, Moscovici argued that minorities could have influence over majorities, provided they gave consistent, unanimous responses. Subsequent research has found that minorities are most effective when they express consistent opinions over time and with each other, when they show that they are invested in their position by making significant personal and material sacrifices, and when they seem to be acting out of principle rather than from ulterior motives (Hogg, 2010). Although they may want to adopt a relatively open-minded and reasonable negotiating style on issues that are less critical to the attitudes they are trying to change, successful minorities must be absolutely consistent with regard to their core arguments (Mugny & Papastamou, 1981).

When minorities are successful at producing influence, they are able to produce strong and lasting attitude change—true private acceptance—rather than simply public conformity. People conform to minorities because they think that they are right, and not because they think it is socially acceptable. Minorities have another, potentially even more important, outcome on the opinions of majority group members—the presence of minority groups can lead majorities to engage in fuller, as well as more divergent, innovative and creative thinking about the

topics being discussed (Martin & Hewstone, 2003; Martin, Martin, Smith, & Hewstone, 2007).

Nemeth and Kwan (1987) had participants work in groups of four on a creativity task in which they were presented with letter strings such as *tdogto* and asked to indicate which word came to their mind first as they looked at the letters. The judgments were made privately, which allowed the experimenters to provide false feedback about the responses of the other group members. All participants indicated the most obvious word (in this case, *dog*) as their response on each of the initial trials. However, the participants were told (according to experimental condition) either that three of the other group members had also reported seeing *dog* and that one had reported seeing *god* or that three out of the four had reported seeing *god* whereas only one had reported *dog*. Participants then completed other similar word strings on their own, and their responses were studied.

Results showed that when the participants thought that the unusual response (for instance, *god* rather than *dog*) was given by a minority of one individual in the group rather than by a majority of three individuals, they subsequently answered more of the new word strings using novel solutions, such as finding words made backward or using a random order of the letters. On the other hand, the individuals who thought that the majority of the group had given the novel response did not develop more creative ideas. The idea is when the participants thought that the novel response came from a group minority (one person), they thought about the responses more carefully, in comparison with the same behaviors performed by majority group members, and this led them to adopt new and creative ways to think about the problems. This result, along with other research showing similar findings, suggests that messages that come from minority groups lead us to think more fully about the decision, which can produce innovative, creative thinking in majority group members (Crano & Chen, 1998).

In summary, we can conclude that minority influence, although not as likely as majority influence, does sometimes occur. The few are able to influence the

many when they are consistent and confident in their judgments but are less able to have influence when they are inconsistent or act in a less confident manner. Furthermore, although minority influence is difficult to achieve, if it does occur it is powerful. When majorities are influenced by minorities they really change their beliefs—the outcome is deeper thinking about the message, private acceptance of the message, and in some cases even more creative thinking.

Situational Determinants of Conformity

The studies of Asch and Moscovici demonstrate the extent to which individuals—both majorities and minorities—can create conformity in others. Furthermore, these studies provide information about the characteristics of the [social situation](#) that are important in determining the extent to which we conform to others. Let's consider some of those variables.

The Size of the Majority

As the number of people in the majority increases, relative to the number of persons in the minority, pressure on the minority to conform also increases (Latané, 1981; Mullen, 1983). Asch conducted replications of his original line-judging study in which he varied the number of confederates (the majority subgroup members) who gave initial incorrect responses from 1 to 16 people, while holding the number in the minority subgroup constant at 1 (the single research participant). You may not be surprised to hear the results of this research: When the size of the majorities got bigger, the lone participant was more likely to give the incorrect answer.

Increases in the size of the majority increase conformity, regardless of whether the conformity is informational or normative. In terms of informational conformity, if more people express an opinion, their opinions seem more valid. Thus bigger majorities should result in more informational conformity. But larger majorities will also produce more normative conformity

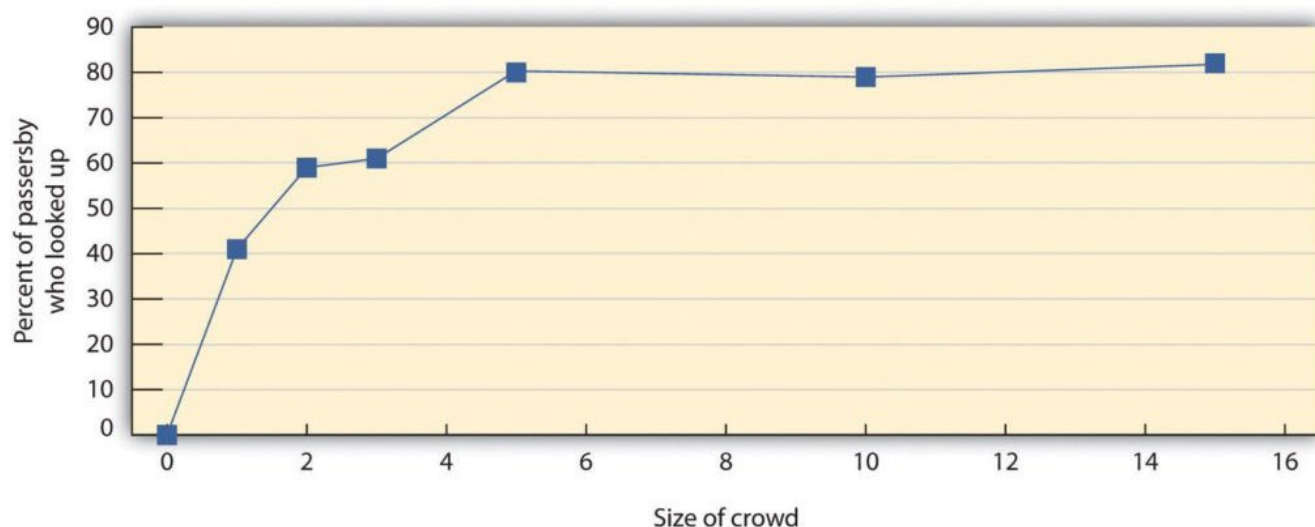
because being different will be harder when the majority is bigger. As the majority gets bigger, the individual giving the different opinion becomes more aware of being different, and this produces a greater need to conform to the prevailing norm.

Although increasing the size of the majority does increase conformity, this is only true up to a point. *The increase in the amount of conformity that is produced by adding new members to the majority group* (known as the [social impact](#) of each group member) is greater for initial majority members than it is for later members (Latané, 1981). This pattern is shown in Figure 2.5 “[Social Impact](#)”, which presents data from a well-known experiment by Stanley Milgram and his colleagues (Milgram, Bickman, & Berkowitz, 1969) that studied how people are influenced by the behavior of others on the streets of New York City.

Milgram had confederates gather in groups on 42nd street in New York City, in front of the Graduate Center of the City University of New York, each looking up at a window on the sixth floor of the building. The confederates were formed into groups ranging from one to 15 people. A video camera in a room on the sixth floor above recorded the behavior of 1,424 pedestrians who passed along the sidewalk next to the groups.

As you can see in Figure 2.5 “Social Impact”, larger groups of confederates increased the number of people who also stopped and looked up, but the influence of each additional confederate was generally weaker as size increased. Groups of three confederates produced more conformity than did a single person, and groups of five produced more conformity than groups of three. But after the group reached about six people, it didn’t really matter very much. Just as turning on the first light in an initially dark room makes more difference in the brightness of the room than turning on the second, third, and fourth lights does, adding more people to the majority tends to produce diminishing returns—less effect on conformity.

Figure 2.5 – Social Impact



This figure shows the percentage of participants who looked up as a function of the size of the crowd on the street in Milgram's (1969) study on the streets of New York. You can see that the amount of conformity increases dramatically until there are five participants, after which it levels off. Similar patterns have been found in many other studies of conformity.

Group size is an important variable that influences a wide variety of behaviors of the individuals in groups. People leave proportionally smaller tips in restaurants as the number in their party increases, and people are less likely to help as the number of bystanders to an incident increases (Latané, 1981). The number of group members also has an important influence on group performance: As the size of a working group gets larger, the contributions of each individual member to the group effort become smaller. In each case, the influence of group size on behavior is found to be similar to that shown in Figure 2.5 “Social Impact”.

As you can see in Figure 2.5 “Social Impact”, the effect of adding new individuals to the group eventually levels off entirely, such that adding more people to the majority after that point makes no meaningful difference in the amount of conformity. This **peak** usually occurs when the majority has **about four or five people**. One reason that the impact of new group members decreases so rapidly is because as the number in the group increases, the individuals in the majority are soon seen more as a group rather than as separate individuals. When there are only a couple of individuals expressing opinions, each person is likely to be seen as an individual, holding his or her

own unique opinions, and each new individual adds to the impact. As a result, two people are more influential than one, and three more influential than two. However, as the number of individuals grows, and particularly when those individuals are perceived as being able to communicate with each other, the individuals are more likely to be seen as a group rather than as individuals. At this point, adding new members does not change the perception; regardless of whether there are four, five, six, or more members, the group is still just a group. As a result, the expressed opinions or behaviors of the group members no longer seem to reflect their own characteristics, so much as they do that of the group as a whole, and thus increasing the number of group members is less effective in increasing influence (Wilder, 1977).

The Unanimity of the Majority

Although the number of people in the group is an important determinant of conformity, it cannot be the only thing—if it were, minority influence would be impossible. It turns out that the *consistency* or *unanimity* of the group members is even more important. In Asch's study, as an example, conformity occurred not so much because many confederates gave a wrong answer but rather because each of the confederates gave the same wrong answer. In one follow-up study that he conducted, Asch increased the number of confederates to 16 but had just one of those confederates give the correct answer. He found that in this case, even though there were 15 incorrect and only one correct answer given by the confederates, conformity was nevertheless sharply reduced—to only about 5% of the participants' responses. And you will recall that in the minority influence research of Moscovici, the same thing occurred; conformity was only observed when the minority group members were completely consistent in their expressed opinions.

Although you might not be surprised to hear that conformity decreases when one of the group members gives the right answer, you may be more surprised to hear that conformity is reduced even when the dissenting confederate gives a different *wrong* answer. For example, conformity is reduced dramatically in Asch's line-judging situation, such that virtually all participants give the correct

answer (assume it is line 3 in this case) even when the majority of the confederates have indicated that line 2 is the correct answer and a single confederate indicates that line 1 is correct. In short, **conformity is reduced** when there is any **inconsistency** among the members of the majority group—even when one member of the majority gives an answer that is even more incorrect than that given by the other majority group members (Allen & Levine, 1968).

Why should unanimity be such an important determinant of conformity? For one, when there is complete agreement among the majority members, the individual who is the target of influence stands completely alone and must be the first to break ranks by giving a different opinion. Being the only person who is different is potentially embarrassing, and people who wish to make a good impression on, or be liked by, others may naturally want to avoid this. If you can convince your friend to wear blue jeans rather than a coat and tie to a wedding, then you're naturally going to feel a lot **less conspicuous** when you wear jeans too.

Second, when there is complete agreement—remember the consistent minority in the studies by Moscovici—the participant may become less sure of his or her own perceptions. Because everyone else is holding the exact same opinion, it seems that they must be correctly responding to the external reality. When such doubt occurs, the individual may be likely to conform due to informational conformity. Finally, when one or more of the other group members gives a different answer than the rest of the group (so that the unanimity of the majority group is broken), that person is no longer part of the group that is doing the influencing and becomes (along with the participant) part of the group being influenced. You can see that another way of describing the effect of unanimity is to say that as soon as the individual has someone who agrees with him or her that the others may not be correct (a supporter or ally), then the pressure to conform is reduced. Having one or more supporters who **challenge** the status quo validates one's own opinion and makes **disagreeing** with the majority **more likely** (Allen, 1975; Boyanowsky & Allen, 1973).

The Importance of the Task

Still another determinant of conformity is the perceived importance of the decision. The studies of Sherif, Asch, and Moscovici may be criticized because the decisions that the participants made—for instance, judging the length of lines or the colors of objects—seem rather trivial. But what would happen when people were asked to make an important decision? Although you might think that conformity would be less when the task becomes more important (perhaps because people would feel uncomfortable relying on the judgments of others and want to take more responsibility for their own decisions), the influence of task importance actually turns out to be more complicated than that.

Research Focus: How Task Importance and Confidence Influence Conformity

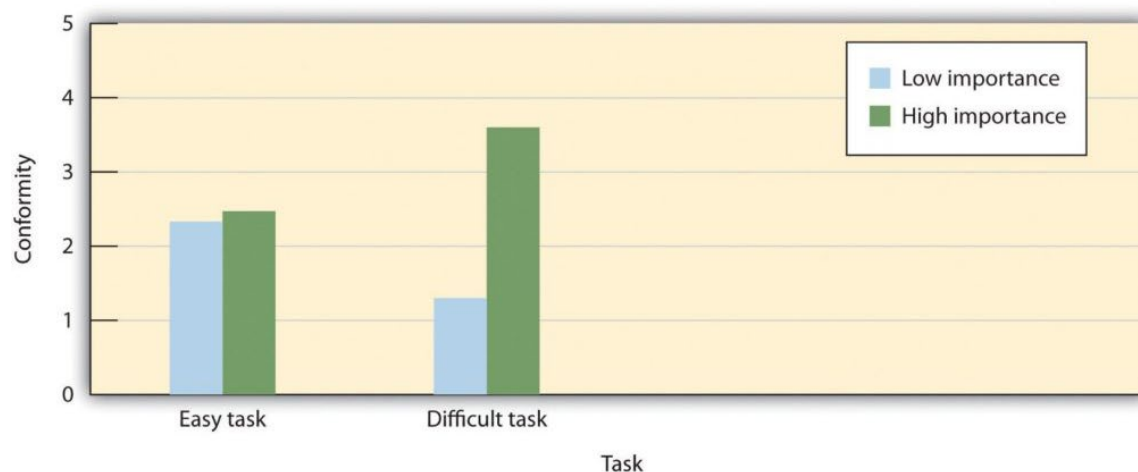
The joint influence of an individual's confidence in his or her beliefs and the importance of the task was demonstrated in an experiment conducted by Baron, Vandello, and Brunsman (1996) that used a slight modification of the Asch procedure to assess conformity. Participants completed the experiment along with two other students, who were actually experimental confederates. The participants worked on several different types of trials, but there were 26 that were relevant to the conformity predictions. On these trials a photo of a single individual was presented first, followed immediately by a “lineup” photo of four individuals, one of whom had been viewed in the initial slide (but who might have been dressed differently):

The participants' task was to call out which person in the lineup was the same as the original individual using a number between 1 (the

person on the left) and 4 (the person on the right). In each of the critical trials the two confederates went before the participant and they each gave the same wrong response.

Two experimental manipulations were used. First, the researchers manipulated task importance by telling some participants (the *high importance condition*) that their performance on the task was an important measure of eyewitness ability and that the participants who performed most accurately would receive \$20 at the end of the data collection. (A lottery using all the participants was actually held at the end of the semester, and some participants were paid the \$20.) Participants in the *low-importance condition*, on the other hand, were told that the test procedure was part of a pilot study and that the decisions were not that important. Second, task difficulty was varied by showing the test and the lineup photos for 5 and 10 seconds, respectively (*easy condition*) or for only ½ and 1 second, respectively (*difficult condition*). The conformity score was defined as the number of trials in which the participant offered the same (incorrect) response as the confederates.

Figure 2.6



On easy tasks, participants conformed less when they thought that the decision was of high (versus low) importance, whereas on difficult tasks, participants conformed more when they thought the decision was of high importance. Data are from Baron et al. (1996).

As you can see in the preceding figure, an interaction between task difficulty and task importance was observed. On easy tasks, participants conformed less to the incorrect judgments of others when the decision had more important consequences for them. In these cases, they seemed to rely more on their own opinions (which they were convinced were correct) when it really mattered, but were more likely to go along with the opinions of the others when things were not that critical (probably normative conformity).

On the difficult tasks, however, results were the opposite. In this case participants conformed more when they thought the decision was of high, rather than low, importance. In these cases in which they were more unsure of their opinions and yet they really wanted to be correct, they used the judgments of others to inform their own views (informational conformity).

Key Takeaways

- [Social influence](#) creates conformity.
- Influence may occur in more passive or more active ways.
- We conform both to gain accurate knowledge (**informational conformity**) and to avoid being rejected by others (**normative conformity**).
- Both **majorities** and **minorities** may create social influence, but they do so in different ways.
- The characteristics of the **social situation**, including the **number of people** and the **unanimity** have a strong influence on conformity.

Adapted from “Chapter 7.1: The Many Varieties of Conformity” of [Principles of Social Psychology](#), 2015, used according to creative commons [CC BY-NC-SA 4.0](#)

← 2.0 Influencing and Conform...

2.2 Obedience, Power, and ... →

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2.2 Obedience, Power, and Leadership

Learning Objectives

1. Describe and interpret the results of Stanley Milgram's research on obedience.
2. Describe and interpret the results of Zimbardo's (Stanford) Prison Study.

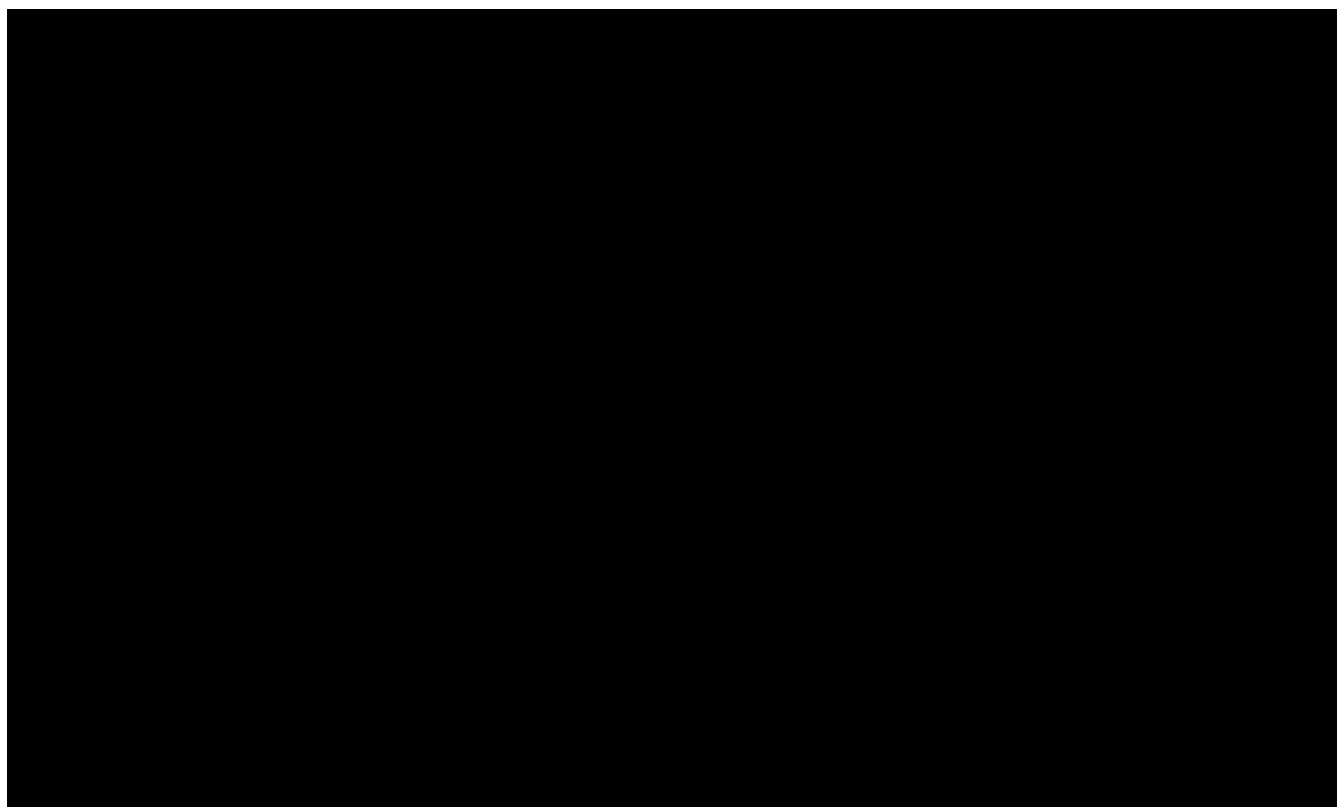
One of the fundamental aspects of social interaction is that some individuals have more influence than others. [Social power](#) can be defined as the ability of a person to create [conformity](#) even when the people being influenced may attempt to resist those changes (Fiske, 1993; Keltner, Gruenfeld, & Anderson, 2003). Bosses have power over their workers, parents have power over their children, and, more generally, we can say that those in authority have power over their subordinates. In short, power refers to the process of [social influence](#) itself—those who have power are those who are most able to influence others.

Milgram's Studies on Obedience to Authority

The powerful ability of those in authority to control others was demonstrated in a remarkable set of studies performed by Stanley Milgram (1974). Milgram was interested in understanding the factors that lead people to obey the orders given by people in authority. He designed a study in which he could observe the extent to which a person who presented himself as an authority would be able



to produce obedience, even to the extent of leading people to cause harm to others.



Video Clip 1 – ABC News’ [replication](#) of Milgram’s shocking study (27+ min. – 2010.
There are some scenes and language that are not appropriate for children and may be disturbing to some. Thus, discretion is advised.

What were persons who did Not obey like?

Milgram’s Obedience to Authority Experiment

Like many other social psychologists, Milgram’s interest in conformity stemmed in part from his desire to understand how the presence of a powerful person—particularly the German dictator Adolph Hitler who ordered the killing of millions of people during World War II—could produce obedience. Under Hitler’s direction the German SS troops oversaw the execution of 6 million Jews as well as other “undesirables,” including political and religious dissidents, homosexuals, the mentally and physically disabled, and prisoners of war.

Milgram used newspaper ads to recruit men (and in one study, women) from a wide variety of backgrounds to participate in his research. When the research participant arrived at the lab, he or she was introduced to a man whom the participant believed was another research participant but who was actually an [experimental confederate](#). The experimenter explained that the goal of the research was to study the effects of punishment on [learning](#). After the participant and the confederate both consented to be in the study, the researcher explained that one of them would be the teacher and the other the learner. They were each given a slip of paper and asked to open it and to indicate what it said. In fact both papers read *teacher*, which allowed the confederate to pretend that he had been assigned to be the learner and thus to assure that the actual participant was always the teacher.

While the research participant (now the teacher) looked on, the learner was taken into the adjoining shock room and strapped to an electrode that was to deliver the punishment. The experimenter explained that the teacher's job would be to sit in the control room and to read a list of word pairs to the learner. After the teacher read the list once, it would be the learner's job to remember which words went together. For instance, if the word pair was *blue-sofa*, the teacher would say the word *blue* on the testing trials and the learner would have to indicate which of four possible words (*house, sofa, cat, or carpet*) was the correct answer by pressing one of four buttons in front of him.

After the experimenter gave the "teacher" a sample shock (which was said to be at 45 volts) to demonstrate that the shocks really were painful, the experiment began. The research participant first read the list of words to the learner and then began testing him on his learning. The shock panel apparatus was presented in front of the teacher, and the learner was not visible in the shock room. The experimenter sat behind the teacher and explained to him that each time the learner made a mistake the teacher was to press one of the shock switches to administer the shock. Moreover, which switch was to be pressed increased by one level with each mistake, such that each mistake required a stronger shock.

Once the learner (who was, of course, actually an experimental confederate) was alone in the shock room, he unstrapped himself from the shock machine and brought out a tape recorder that he used to play a prerecorded series of responses that the teacher could hear through the wall of the room.

As you can see in Table 2.1 “The Confederate’s Schedule of Protest in the Milgram Experiments”, the teacher heard the learner say “ugh!” after the first few shocks. After the next few mistakes, when the shock level reached 150 volts, the learner was heard to exclaim “Let me out of here. I have a heart trouble!” As the shock reached about 270 volts the learner’s protests became more vehement, and after 300 volts the learner proclaimed that he was not going to answer any more questions. From 330 volts and up the learner was silent. The experimenter responded to participants’ questions at this point, if they asked any, with a scripted response indicating that they should continue reading the questions and applying increasing shock when the learner did not respond.

TABLE 2.1 THE CONFEDERATE’S SCHEDULE OF PROTEST IN THE MILGRAM EXPERIMENTS

Volts	Response
75 volts	Ugh!
90 volts	Ugh!
105 volts	Ugh! (louder)
120 volts	Ugh! Hey, this really hurts
135 volts	Ugh!!
150 volts	Uh!! Experimenter! That’s all. Get me out of here. I told you I had heart trouble. My heart’s starting to bother me now. Get me out of here, please. My heart’s starting to bother me. I refuse to go on. Let me out!
165 volts	Ugh! Let me out! (shouting)
180 volts	Ugh! I can’t stand the pain. Let me out

	of here! (shouting)
195 volts	Ugh! Let me out of here! Let me out of here! My heart's bothering me. Let me out of here! You have no right to keep me here! Let me out! Let me out of here! Let me out! Let me out of here! My heart's bothering me. Let me out! Let me out!
210 volts	Ugh!! Experimenter! Get me out of here. I've had enough. I won't be in the experiment any more.
225 volts	Ugh!
240 volts	Ugh!
255 volts	Ugh! Get me out of here.
270 volts	(agonized scream) Let me out of here. Let me out of here. Let me out of here. Let me out. Do you hear? Let me out of here.
285 volts	(agonized scream)
300 volts	(agonized scream) I absolutely refuse to answer any more. Get me out of here. You can't hold me here. Get me out. Get me out of here.
315 volts	(intensely agonized scream) Let me out of here. Let me out of here. My heart's bothering me. Let me out, I tell you. (hysterically) Let me out of here. Let me out of here. You have no right to hold me here. Let me out! Let me out! Let me out! Let me out of here! Let me out! Let me out!

The results of Milgram's research were themselves quite shocking. Although all of the participants gave the initial mild levels of shock, responses varied after that. Some refused to continue after about 150 volts, despite the insistence of the experimenter to continue to increase the shock level. Still others, however, continued to present the questions, and to administer the shocks, under the pressure of the experimenter, who demanded that they continue. In the end, 65% of the participants continued giving the shock to the learner all the way up to the 450 volts maximum, even though that shock was marked as "danger: severe shock" and there had been no response heard from the participant for several trials. In sum, well over half of the men who participated had, as far as they knew, shocked another person to death, all as part of a supposed experiment on learning.

In case you are thinking that such high levels of obedience would not be observed in today's modern [culture](#), there is fact evidence that they would be. Studies similar to Milgram's findings have been conducted all over the world (Blass, 1999) and have found similar levels of conformity, with obedience rates ranging from a high of 90% in Spain and the Netherlands (Meeus & Raaijmakers, 1986) to a low of 16% among Australian women (Kilham & Mann, 1974).

Recently, Milgram's results were almost exactly replicated, using men and women from a wide variety of ethnic groups, in a study conducted by Jerry Burger at Santa Clara University. In this replication of the Milgram experiment, 65% of the men and 73% of the women agreed to administer increasingly painful electric shocks when they were ordered to by an authority figure (Borge, 2010). In the replication, however, the participants were not allowed to go beyond the 150 volt shock switch. (Please see the video clip above.)

Although it might be tempting to conclude that Milgram's experiments demonstrate that people are innately evil creatures who are ready to shock others to death, Milgram did not believe that this was the case. Rather, he felt

that it was the [social situation](#), and Not the people themselves, that was responsible for the behavior. To demonstrate this, Milgram conducted research that explored a number of variations on his original procedure, each of which demonstrated that changes in the situation could dramatically influence the amount of conformity. These variations are summarized in Figure 2.8 “Authority and Obedience in Stanley Milgram’s Studies”.

Figure 2.8 – Authority and Obedience in Stanley Milgram’s Studies

Experimental Replication	Description	Percent Obedience
Experiment 1:	Initial study: Yale University men and women	<div><div></div></div> 65
Experiment 10:	The study is conducted off campus, in Bridgeport, CT	<div><div></div></div> 48
Experiment 3:	The teacher is in the same room as the learner	<div><div></div></div> 40
Experiment 4:	The participant must hold the learner’s hand on the shock pad	<div><div></div></div> 20
Experiment 7:	The experimenter communicates by phone from another room	<div><div></div></div> 20
Experiment 13:	An “ordinary man” (presumably another research participant) gives orders	<div><div></div></div> 20
Experiment 17:	Two other research participants refuse to give shock	<div><div></div></div> 10
Experiment 11:	The teacher chooses his own preferred shock level	0
Experiment 15:	One experimenter indicates that the participant should not shock	0

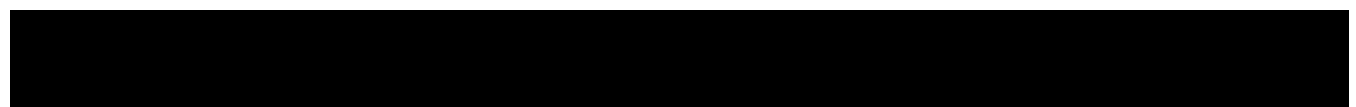
This figure presents the percentage of participants in Stanley Milgram’s (1974) studies on obedience who were maximally obedient (that is, who gave all 450 volts of shock) in some of the variations that he conducted.

In the initial study the authority’s status and power was maximized—the experimenter had been introduced as a respected scientist at a respected university. However, in replications of the study in which the experimenter’s

authority was decreased, obedience also declined. In one replication the status of the experimenter was reduced by having the experiment take place in a building located in Bridgeport, Connecticut, rather than at the labs on the Yale University campus, and the research was ostensibly sponsored by a private commercial research firm instead of by the university. In this study less obedience was observed (only 48% of the participants delivered the maximum shock). Full obedience was also reduced (to 20%) when the experimenter's ability to express his authority was limited by having him sit in an adjoining room and communicate to the teacher by telephone. And when the experimenter left the room and had another student (actually a confederate) give the instructions for him, full conformity or obedience was also reduced to 20%.

In addition to the role of authority, Milgram's studies also confirmed the role of unanimity (and the potential power of dissent) in producing conformity. When another research participant (again an experimental confederate) began by giving the shocks but then later refused to continue and the participant was asked to take over, only 10% were obedient. And if two experimenters were present but only one proposed shocking while the other argued for stopping the shocks, all the research participants took the more benevolent advice and did not shock. Finally, in another condition the teacher sat next to the learner and was forced to wear an insulated glove and to hold the learner's hand on the shock pad as he administered the shock. Again, obedience was reduced, this time to only 30%.

Perhaps most telling regarding the important role of the situation were the studies in which Milgram allowed the participants to choose their own shock levels or in which one of the experimenters suggested that they should not actually use the shock machine. In these situations, there was virtually no shocking. These conditions show that people do not like to harm others, and when given a choice they will not. On the other hand, the social situation can create powerful, and potentially deadly, social influence.



Video Clip 2 – The Zimbardo (Stanford) Prison Study explanation. There are some scenes and language that are not appropriate for children and may be disturbing to some. Thus, discretion is advised.

Social Psychology in the Public Interest: The Zimbardo Prison Studies and Abu Ghraib

In Milgram's research we can see a provocative demonstration of how people who have power can control the behavior of others. Can our understanding of the social psychological factors that produce conformity and obedience help us explain the events that occurred in 2004 at Abu Ghraib, the Iraqi prison in which U.S. soldiers physically and psychologically tortured their Iraqi prisoners? The social psychologist Philip Zimbardo thinks so. He notes the parallels between the events that occurred at Abu Ghraib and the events that occurred in the "prison study" that he conducted in 1971.

In that study, Zimbardo and his colleagues set up a **mock**



Photo of an Iraqi prisoner being tortured by soldiers at the Abu Ghraib prison. [Wikimedia Commons](#) – public domain.

prison. They selected 23 student volunteers and divided them into two groups. One group was chosen to be the “prisoners.” They were picked up at their homes by actual police officers, “arrested,” and brought to the prison to be guarded by the other group of students—the “guards.”

The two groups were placed in a setting that was designed to look like a real prison, and the **role-play** began.

The Zimbardo Prison Study

The study was expected to run for two weeks. However, on the second day, the prisoners tried to rebel against the guards. The guards quickly moved to stop the rebellion by using both psychological punishment and physical abuse. In the ensuing days, the guards denied the prisoners food, water, and sleep; shot them with fire-extinguisher spray; threw their blankets into the dirt; and stripped them naked. On the fifth night the experimenters witnessed the guards putting bags over the prisoners’ heads, chaining their legs, and marching them around. At this point the researchers stopped the experiment early. The conclusions of Zimbardo’s research were clear: People may be so profoundly influenced by their social situation that they become coldhearted jail masters who torture their victims.

Zimbardo’s research can help us understand the events that occurred at Abu Ghraib. Zimbardo acted as an expert witness in the trial of Sergeant Chip Frederick, who was sentenced to eight years in prison for his role in the abuse at Abu Ghraib. Frederick was the Army

reservist who was put in charge of the night shift at Tier 1A, where the detainees were abused. During this trial Frederick said, “What I did was wrong, and I don’t understand why I did it.” Zimbardo believes that Frederick acted exactly like the students in the prison study did. He worked in a prison that was overcrowded, filthy, and dangerous, and where he was expected to maintain control over the Iraqi prisoners—in short, the situation he found himself in was very similar to that of Zimbardo’s prison study.

In a recent interview, Zimbardo argued (you can tell that he is a social psychologist) that “human behavior is more influenced by things outside of us than inside.” He believes that, despite our moral and religious beliefs and despite the inherent goodness of people, there are times when external circumstances can overwhelm us and we do things we never thought we were capable of doing. He argued that “if you’re not aware that this can happen, you can be seduced by evil. We need inoculations against our own potential for evil. We have to acknowledge it. Then we can change it” (Driefus, 2007).

You may wonder whether the extreme behavior of the guards and prisoners in Zimbardo’s prison study was unique to the particular social context that he created. Recent research by Stephen Reicher and Alex Haslam (2006) suggests that this is indeed the case. In their research, they recreated Zimbardo’s prison experiment while making some small, but important, changes. For one, the prisoners were not “arrested” before the study began, and the setup of the jail was less realistic. Furthermore, the researchers in this experiment told the “guards” and the “prisoners” that the groups were arbitrary and could change over time (that is, that some prisoners might be able to be promoted to guards). The results of this study were entirely different than those found by Zimbardo. Although this study was also stopped early, this was more because the guards felt uncomfortable in their superior position than because the prisoners were being abused. This “prison” simply did not feel like a real prison to the

participants, and as a result they did not take on the roles they were assigned. Again, the conclusions are clear—the specifics of the social situation, more than the people themselves, are often the most important determinants of behavior.

Key Takeaways

- Social power can be defined as the ability of a person to create conformity, even when the people being influenced may attempt to resist those changes.
- Milgram’s studies on obedience demonstrated the remarkable extent to which the social situation and people with authority have the power to create obedience.
- Zimbardo’s Stanford Prison study demonstrated how powerful the social situation and social roles can be.
- “The Power of the Situation” – The specifics of the social situation, more than the people themselves, are often the most important determinants of behavior

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2.3 Person Differences in Conformity

Learning Objectives

1. Explain the concept of psychological reactance and describe how and when it might occur.

Person Differences

Even in cases in which the pressure to conform is strong and a large percentage of individuals do conform (such as in Solomon Asch's line-judging research), not everyone does so. There are usually some people willing and able to go against the prevailing norm. In Asch's study, for instance, despite the strong situational pressures, 24% of the participants never conformed on any of the trials.

People prefer to have an "optimal" balance between being similar to, and different from, others (Brewer, 2003). When people are made to feel too similar to others, they tend to express their individuality, but when they are made to feel too different from others, they attempt to increase their acceptance by others. Supporting this idea, research has found that people who have lower self-esteem are more likely to conform in comparison with those who have higher self-esteem. This makes sense because self-esteem rises when we know we are being accepted by others, and people with lower self-esteem have a greater need to belong. And people who are dependent on and who have a strong need for approval from others are also more conforming (Bornstein,



1992).

Age also matters, such that individuals who are either younger or older are more easily influenced than individuals who are in their 40s and 50s (Visser & Krosnick, 1998). People who highly identify with the group that is creating the [conformity](#) are also more likely to conform to group norms, in comparison to people who don't really care very much (Jetten, Spears, & Manstead, 1997; Terry & Hogg, 1996).

However, although there are some differences among people in terms of their tendency to conform (it has even been suggested that some people have a “need for uniqueness” that leads them to be particularly likely to resist conformity; Snyder & Fromkin, 1977), research has generally found that the impact of person variables on conformity is smaller than the influence of situational variables, such as the number and unanimity of the majority.

Psychological Reactance

[Conformity](#) is usually quite adaptive overall, both for the individuals who conform and for the group as a whole. Conforming to the opinions of others can help us enhance and protect ourselves by providing us with important and accurate information and can help us better relate to others. Following the directives of effective leaders can help a group attain goals that would not be possible without them. And if only half of the people in your neighborhood thought it was appropriate to stop on red and go on green but the other half thought the opposite—and behaved accordingly—there would be problems indeed.

But [social influence](#) does not always produce conformity. If we feel that we have the choice to conform or not conform, we may well choose to do so in order to be accepted or to obtain valid knowledge. On the other hand, if we perceive that others are trying to force our conformity, the influence pressure may backfire, resulting in the opposite of what the influencer intends.

Consider an experiment conducted by Pennebaker and Sanders (1976), who attempted to get people to stop writing graffiti on the walls of campus restrooms. In some restrooms they posted a sign that read “Do not write on these walls under any circumstances!” whereas in other restrooms they placed a sign that simply said “Please don’t write on these walls.” Two weeks later, the researchers returned to the restrooms to see if the signs had made a difference. They found that there was much less graffiti in the second restroom than in the first one. It seems as if people who were given strong pressures to not engage in the behavior were more likely to react against those directives than were people who were given a weaker message.

When individuals feel that their freedom is being threatened by influence attempts and yet they also have the ability to resist that persuasion, they may experience [psychological reactance](#), a strong motivational state that prevents conformity (Brehm, 1966; Miron & Brehm, 2006). Reactance is aroused when our ability to choose which behaviors to engage in is eliminated or threatened with elimination. The outcome of the experience of reactance is that people may not conform at all and may even move their opinions or behaviors away from the desires of the influencer.

Reactance represents a desire to restore freedom that is being threatened. A child who feels that his or her parents are forcing him to eat his asparagus may react quite vehemently with a strong refusal to touch the plate. And an adult who feels that she is being pressured by a car salesman might feel the same way and leave the showroom entirely, resulting in the opposite of the salesman’s intended outcome.

Of course, parents are sometimes aware of this potential, and even use “reverse psychology”—for example, telling a child that she cannot go outside when they really want her to, hoping that reactance will occur. In the Broadway musical *The Fantasticks*, neighboring fathers set up to make one’s daughter and the other’s son fall in love with each other by building a fence between their properties. The fence is seen by the children as an infringement on their freedom to see each other, and as predicted by the idea of reactance, they

ultimately fall in love.

In addition to helping us understand the affective determinants of conformity and of failure to conform, reactance has been observed to have its ironic effects in a number of real-world contexts. For instance, Wolf and Montgomery (1977) found that when judges give jury members instructions indicating that they absolutely must not pay any attention to particular information that had been presented in a courtroom trial (because it had been ruled as inadmissible), the jurors were more likely to use that information in their judgments. And Bushman and Stack (1996) found that warning labels on violent films (for instance, “This film contains extreme [violence](#)—Viewer discretion advised”) created more reactance (and thus led participants to be more interested in viewing the film) than did similar labels that simply provided information (“This film contains extreme violence”). In another relevant study, Kray, Reb, Galinsky, and Thompson (2004) found that when women were told that they were poor negotiators and would be unable to succeed on a [negotiation](#) task, this information led them to work even harder and to be more successful at the task.

Finally, within clinical therapy, it has been argued that people sometimes are less likely to try to reduce the harmful behaviors that they engage in, such as smoking or drug abuse, when the people they care about try too hard to press them to do so (Shoham, Trost, & Rohrbaugh, 2004). One patient was recorded as having reported that his wife kept telling him that he should quit drinking, saying, “If you loved me enough, you’d give up the booze.” However, he also reported that when she gave up on him and said instead, “I don’t care what you do anymore,” he then enrolled in a treatment program (Shoham et al., 2004, p. 177).

Key Takeaways

- Although some person variables predict conformity, overall situational variables are more important.

[Psychological reactance](#) occurs when people feel that their ability to choose which behaviors to engage in is eliminated or threatened with elimination. The outcome of the experience of reactance is that people may not conform at all and may even move their opinions or behaviors away from the desires of the influencer.

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Chapter 3: Social Cognition

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3.0 Social Cognition

DNA Evidence Sets Free Another Mistakenly Identified Prisoner

On July 12, 1982, a woman in northwest Louisiana was held at gunpoint and raped. During the four hours that the rapist stayed in her house, he identified himself as Marcus Johnson from Leesville, Louisiana. When the victim reported the attack, the police could find no information about a Marcus Johnson, but they did find a Rickie Johnson who had once been arrested on a minor traffic charge. Mr. Johnson became the only suspect in the case.

The victim was shown a photo lineup of three men who were listed as potential perpetrators, although the image of Johnson was eight years old. The victim identified Johnson as the perpetrator, even though he looked very little like the description she had given of the attacker after the rape.

Johnson was charged with aggravated sexual assault and was tried in Sabine Parish, Louisiana. During the trial the victim told the jury that she was “positive” that he was the perpetrator and there was “no question in [her] mind.”

In 2007, however, Johnson’s innocence was determined with forensic DNA testing, a technology that was not available at the time of the crime.



Rickie Johnson's case is only one of many recent DNA exonerations, most of which stem from eyewitness misidentifications. In fact, eyewitness misidentification is the single greatest cause of wrongful convictions. Over the past 10 years, almost 400 people have been released from prison when DNA evidence confirmed that they could not have committed the crime for which they had been convicted. And in more than three-quarters of these cases, the cause of the innocent people being falsely convicted was erroneous eyewitness testimony (Wells, Memon, & Penrod, 2006).

According to the Innocence Project (<http://www.innocenceproject.org>), "The human mind is not like a tape recorder; we neither record events exactly as we see them, nor recall them like a tape that has been rewound."

In October 1999, the U.S. Department of Justice released the first national guide for collecting and preserving eyewitness evidence. The guide was commissioned by U.S. Attorney General Janet Reno and consisted of a panel of experts, including (applied) social (cognition) psychologist **Gary Wells**, the world's foremost authority on the psychology of eyewitness identification.

Source: http://www.innocenceproject.org/Content/Rickie_Johnson.php

Although being able to correctly identify the perpetrator of a crime that we have observed is fortunately not part of our everyday social activities, we do need to be able to accurately learn about the people that we interact with every day. Our remarkable abilities to size up and remember other people are enhanced by our affective and cognitive capacities. In this chapter, our focus will be on cognition, and we will consider how we learn about, remember information about, and judge others (Fiske & Taylor, 2007; Macrae & Quadflieg, 2010).

Most generally, this chapter is about [social cognition](#), *the mental activity that relates to social activities and helps us meet the goal of understanding and predicting the behavior of ourselves and others*. A fundamental part of social cognition involves [learning](#)—*the relatively permanent change in knowledge*

that is acquired through experience. We will see that a good part of our learning and our judgments of other people operates out of our awareness—we are profoundly affected by things that we do not know are influencing us. But we also consciously think about and analyze our lives and our relationships with others, seeking out the best ways to fulfill our goals and aspirations.

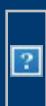
As we investigate the role of cognition in everyday life, we’ll consider the ways that people use their cognitive abilities to make good decisions and to inform their behavior in a useful and accurate way. We’ll also consider the potential for mistakes and biases in human judgment. We’ll see that although we are generally pretty good at sizing up other people and creating effective social interactions, we are not perfect. And we’ll see that the errors we make frequently occur because of our reliance on our schemas and attitudes and a general tendency to take shortcuts through the use of cognitive **heuristics**: *information-processing rules of thumb that enable us to think in ways that are quick and easy but that may sometimes lead to error.* In short, although our cognitive abilities are “good enough,” there are definitely some things we could do better.

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3.1 Sources of Social Knowl...→

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3.1 Sources of Social Knowledge

Learning Objectives

1. Explain how and when schemas and attitudes do and do not change as a result of the operation of accommodation and assimilation.
2. Outline the ways that schemas are likely to be maintained through processes that create assimilation.

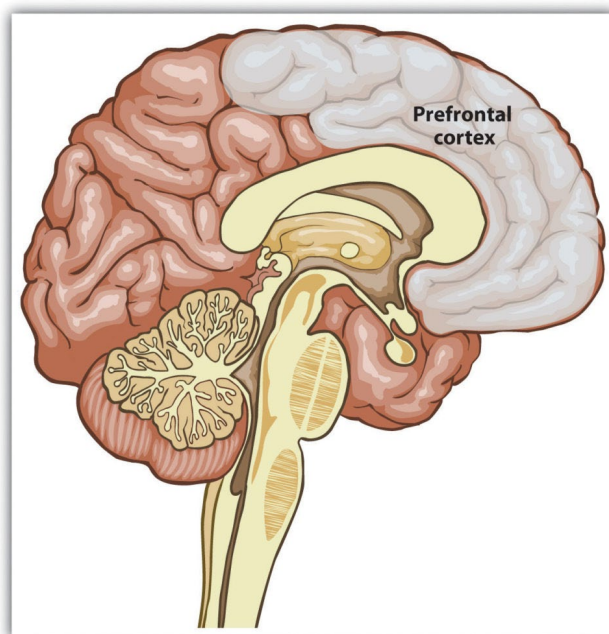
Human beings have very large brains and highly developed cognitive capacities. Thus it will come as no surprise that we meet the challenges that we face in everyday life largely by thinking about them and then planning what to do about them. Over time, people develop a huge amount of knowledge about the self, other people, social relationships, and social groups. This knowledge guides our responses to the people we interact with every day.

Schemas as Social Knowledge

The outcome of [learning](#) is knowledge, and this *knowledge is organized and stored* in schemas. In the brain, our *schemas reside primarily in the [prefrontal cortex](#)*, the part of the brain that lies in front of the motor areas of the cortex and that helps us remember the characteristics and actions of other people, plan complex social behaviors, and coordinate our behaviors with those of others (Mitchell, Mason, Macrae, & Banaji, 2006). The prefrontal cortex is the “social” part of the brain. It is also the newest part of the brain, evolutionarily speaking, and has enlarged as the social relationships among humans have



become more frequent, important, and complex. Demonstrating its importance in social behaviors, people with damage to the prefrontal cortex are likely to experience changes in social behaviors, including memory, personality, planning, and morality (Koenigs et al., 2007).



The prefrontal cortex is the area of the brain that stores information about people and about our interactions with them.

How Schemas Develop: Accommodation and Assimilation

Because they represent our past experience, and because past experience is useful for prediction, our schemas *serve as expectations* about future events. For instance, if you have watched Italian movies or if you have visited Italy, you might have come to the conclusion that Italians frequently gesture a lot with their hands when they talk—that they are quite expressive. This knowledge will be contained in your group schema about Italians. Therefore, when you meet someone who is Italian, or even when you meet someone who reminds you of an Italian person, you may well expect that they will gesture when they talk.

Having a database of social knowledge to draw on is obviously extremely useful. If we didn't know or couldn't remember anything about anyone or about anything that we had encountered in the past, our life would be difficult indeed because *we would continually have to start our learning over again*. Our *schemas* allow us to better understand people and *help us make sense* of information, particularly when the information is unclear or ambiguous. They also allow us to “*fill in the blanks*” by making guesses about what other people are probably like or probably going to do in cases where things are uncertain. Furthermore, the fact that different people have different past experiences—and thus that their schemas and attitudes are different—helps explain why different people draw different conclusions about the same events.

Once they have developed, schemas influence our subsequent learning, such that the new people and situations we encounter are interpreted and understood in terms of our existing knowledge (Piaget & Inhelder, 1966; Taylor & Crocker, 1981). Imagine, for instance, that you have a schema—and thus an expectation—that Italians are very expressive, and you now meet Bianca, who has arrived at your school directly from Rome, Italy. You immediately expect her to be outgoing and expressive. However, as you get to know Bianca, you discover that she is not at all expressive and does not “talk with her hands.” In fact, she is quite shy and reserved. How does existing information influence how we react to the new information that we receive?

One possibility is that the new information simply updates our existing expectations. We might decide, for instance, that there is more variation among Italians in terms of expressiveness than we had previously realized, and we might resolve that Italians can sometimes be very shy and thoughtful. Or perhaps we might note that although Bianca is Italian, she is also a woman. This might lead us change our schema such that we now believe that although Italian men are expressive, Italian women are not. *When existing schemas change on the basis of new information*, we call the process [accommodation](#).

In other cases, however, we engage in [assimilation](#), a process in which *our existing knowledge influences new conflicting information to better fit with*

our existing knowledge, thus reducing the likelihood of schema change. If we used assimilation, instead of changing our expectations about Italians, we might try to reinterpret Bianca's unexpected behavior to make it more consistent with our expectations. For instance, we might decide that Bianca's behavior is actually more expressive than we thought it was at first, or that she is acting in a more shy and reserved manner because she is trying to impress us with her thoughtfulness or because she is not yet comfortable at the new school. Or we might assume that she is expressive at home with her family but not around us. In these cases, the process of assimilation has led us to process the new information about Bianca in a way that allows us to keep our existing expectations about Italians more generally intact.

How Schemas Maintain Themselves: The Power of Assimilation

As we have seen in our earlier discussion, accommodation (i.e., *the changing of beliefs on the basis of new information*) *does occur*—it is the process of *learning itself*. Our beliefs about Italians may well change through our encounters with Bianca. However, there are many factors that lead us to assimilate information to our expectations rather than to accommodate our expectations to fit new information. In fact, we can say that in most cases, once a schema is developed, it will be difficult to change it because the expectation leads us to process new information in ways that serve to strengthen it rather than to weaken it.

The tendency toward assimilation is so strong that it has substantial effects on our everyday [social cognition](#). One outcome of assimilation is [the confirmation bias](#)—*the tendency for people to favor information that confirms their expectations*, regardless of whether the information is true.

Consider the results of a research study conducted by Ross, Lepper, and Hubbard (1975) that demonstrated the confirmation bias. In this research, high school students were asked to read a set of 25 pairs of cards, in which each pair

supposedly contained one real and one fake suicide note. The students' task was to examine both cards and to decide which of the two notes was written by an actual suicide victim. After the participants read each card and made their decision, the experimenter told them whether their decision was correct or incorrect. However, the feedback was not at all based on the participants' responses. Rather, the experimenters arranged the feedback so that, on the basis of random assignment, different participants were told either that they were successful at the task (they got 24 out of 25 correct), average at the task (they got 17 out of 25 correct), or poor at the task (they got 10 out of 25 correct), regardless of their actual choices.

At this point, the experimenters stopped the experiment and completely explained to the participants what had happened, including how the feedback they had received was predetermined so that they would learn that they were either successful, average, or poor at the task. They were even shown the schedule that the experimenters had used to give them the feedback. Then the participants were asked, as a check on their reactions to the experiment, to indicate how many answers they thought they would get correct on a subsequent—and real—series of 25 card pairs.

As you can see in the following figure, the results of this experiment showed a clear tendency for expectations to be maintained in the face of information that should have discredited them. Students who had been told that they were successful at the task indicated that they thought they would get more responses correct in a real test of their ability than those who thought they were average at the task, and students who thought they were average thought they would do better than those told they were poor at the task. In short, once students had been convinced that they were either good or bad at the task, they really believed it. It then became very difficult to remove their beliefs, even by providing information that should have effectively done so.

In this demonstration of the power of assimilation, participants were given initial feedback that they were good, average, or poor on a task but then told that the feedback was entirely false. The feedback, which should have been

discounted, nevertheless continued to influence participants' estimates of how well they would do on a future task. Data are from Ross, Lepper, and Hubbard (1975).

In this demonstration of the power of assimilation, participants were given initial feedback that they were good, average, or poor on a task but then told that the feedback was entirely false. The feedback, which should have been discounted, nevertheless continued to influence participants' estimates of how well they would do on a future task. Data are from Ross, Lepper, and Hubbard (1975).

Why do we tend to hold onto our beliefs rather than change them? One reason that our beliefs often outlive the evidence on which they are supposed to be based is that people come up with reasons to support their beliefs. People who learned that they were good at detecting real suicide notes probably thought of a lot of reasons why this might be the case—"Geez, I predicted that Suzy would break up with Billy" or "I knew that my Mom was going to be sad after I left for college"—whereas the people who learned that they were not good at the task probably thought of the opposite types of reasons—"I had no idea that Jean was going to drop out of high school." You can see that these tendencies will produce assimilation—the interpretation of our experiences in ways that support our existing beliefs. Indeed, research has found that one way to reduce our tendencies to assimilate information into our existing belief is to explicitly force people to think about exactly the opposite belief (Anderson & Sechler, 1986).

In some cases, our existing knowledge acts to direct our attention toward information that matches our expectations and prevents us from attempting to attend to or acknowledge conflicting information (Fiske & Neuberg, 1990). To return to our example of Bianca from Rome, when we first meet her, we may immediately begin to look for signs of expressiveness in her behavior and personality. Because we expect people to confirm our expectations, we frequently respond to new people as if we already know what they are going to be like. Yaacov Trope and Erik Thompson (1997) found in their research that

individuals addressed fewer questions to people about whom they already had strong expectations and that the questions they did ask were likely to confirm the expectations they already had. Because we believe that Italians are expressive, we expect to see that behavior in Bianca, we *preferentially attend to information that confirms those beliefs*, and we tend to ignore any disconfirming information. The outcome is that our expectations resist change (Fazio, Ledbetter, & Towles-Schwen, 2000).

Our reliance on schemas can also make it more difficult for us to “think outside the box.” Peter Wason (1960) asked college students to determine the rule that was used to generate the numbers 2-4-6 by asking them to generate possible sequences and then telling them if those numbers followed the rule. The first guess that students made was usually “consecutive ascending even numbers,” and they then asked questions designed to confirm their hypothesis (“Does 102-104-106 fit?” “What about 434-436-438?”). Upon receiving information that those guesses did fit the rule, the students stated that the rule was “consecutive ascending even numbers.” But the students’ use of the confirmation bias led them to ask only about instances that confirmed their hypothesis and not about those that would disconfirm it. They never bothered to ask whether 1-2-3 or 3-11-200 would fit; if they had, they would have learned that the rule was not “consecutive ascending even numbers” but simply “any three ascending numbers.” Again, you can see that once we have a schema (in this case, a hypothesis), we continually retrieve that schema from memory rather than other relevant ones, leading us to act in ways that tend to confirm our beliefs.

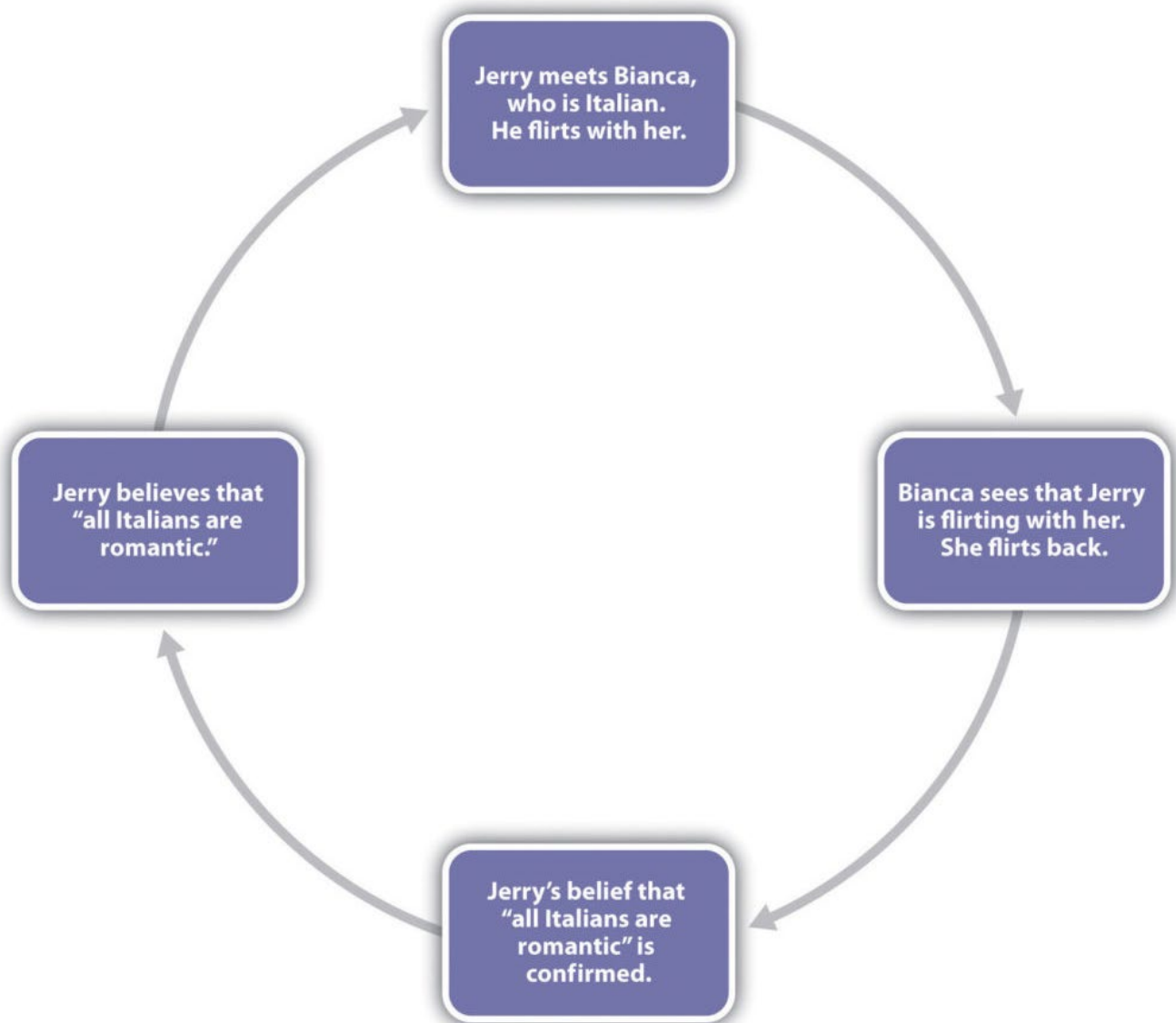
Because expectations influence what we attend to, they also influence what we remember. One frequent outcome is that information that confirms our expectations is more easily processed, is more easily understood, and thus has a bigger impact than does information that disconfirms our expectations. There is substantial research evidence indicating that when processing information about social groups, individuals tend to particularly remember information better that confirms their existing beliefs about those groups (Fyock & Stangor, 1994; Van Knippenberg & Dijksterhuis, 1996). If we have the (statistically erroneous) stereotype that women are bad drivers, we tend to remember the

cases where we see a woman driving poorly but to forget the cases where we see a woman driving well. This of course strengthens and maintains our beliefs and produces even more assimilation. And our schemas may also be maintained because when people get together, they talk about other people in ways that tend to express and confirm existing beliefs (Ruscher & Duval, 1998; Schaller & Conway, 1999).

Darley and Gross (1983) demonstrated how schemas about social class could influence memory. In their research, they gave participants a picture and some information about a fourth-grade girl named Hannah. To activate a schema about her social class, Hannah was pictured sitting in front of a nice suburban house for one half of the participants and was pictured in front of an impoverished house in an urban area for the other half. Then the participants watched a video that showed Hannah taking an intelligence test. As the test went on, Hannah got some of the questions right and some of them wrong, but the number of correct and incorrect answers was the same in both conditions. Then the participants were asked to remember how many questions Hannah got right and wrong. Demonstrating that stereotypes had influenced memory, the participants who thought that Hannah had come from an upper-class background judged that she had gotten more correct answers than those who thought she was from a lower-class background.

This is not to say that we only remember information that matches our expectations. Sometimes we encounter information that is so extreme and so conflicting with our expectations that we cannot help but attend to and remember it (Srull & Wyer, 1989). Imagine that you have formed an impression of a good friend of yours as a very honest person. One day you discover, however, that he has taken some money from your wallet without getting your permission or even telling you. It is likely that this new information—because it is so personally involving and important—will have a dramatic effect on your perception of your friend and that you will remember it for a long time. In short, information that is either consistent with, or very inconsistent with, an existing schema or attitude is likely to be well remembered.

Still another way that our expectations tend to maintain themselves is by leading us to act toward others on the basis of our expectations, creating a [self-fulfilling prophecy](#). A self-fulfilling prophecy is a process that occurs when *our expectations about others lead us to behave toward those others in ways that make those expectations come true*. If I have a stereotype that Italians are fun, then I may act toward Bianca in a friendly way. My friendly behavior may be reciprocated by Bianca, and if many other people also engage in the same positive behaviors with her, in the long run she may actually become a friendlier person, thus confirming our initial expectations. Of course, the opposite is also possible—if I believe that short people are boring or that women are overly emotional, my behavior toward short people and women may lead me to maintain those more negative, and probably inaccurate, beliefs as well.



Self-fulfilling prophecies occur when our existing expectations influence our behavior toward others, thereby creating responses in those others that reinforce our existing expectations.

We can now begin to see why an individual who initially makes a judgment that a person has engaged in a given behavior (e.g., an eyewitness who believes that they saw a given person commit a crime) will find it very difficult to change his or her mind about that decision later. Even if the individual is provided with evidence that suggests that he or she was wrong, that individual will likely assimilate that information to the existing belief. [Assimilation](#) is thus one of many factors that help account for the inaccuracy of eyewitness testimony.

Research Focus: Schemas as Energy Savers

If schemas serve in part to help us make sense of the world around us, then we should be particularly likely to use them in situations where there is a lot of information to learn about, or when we have few cognitive resources available to process information. Schemas function like energy-savers, to help us keep track of things when information processing gets complicated.

Stangor and Duan (1991) tested the hypothesis that people would be more likely to develop schemas when they had a lot of information to learn about. In the research, participants were shown information describing the behaviors of people who supposedly belonged to different social groups, although the groups were actually fictitious and were labeled only as the “red group,” the “blue group,” the “yellow group,” and the “green group.” Each group engaged in behaviors that were primarily either honest, dishonest, intelligent, or unintelligent. Then, after they had read about the groups, the participants were asked to judge the groups and to recall as much information that they had read about them as they could.

Stangor and Duan found that participants remembered more stereotype-supporting information about the groups, when they were required to learn about four different groups than when they only needed to learn about one group or two groups. This result is consistent with the idea that we use our stereotypes more when “the going gets rough”—that is, when we need to rely on them to help us make sense of new information.

Bodenhausen (1990) presented research participants with information about court cases in jury trials. Furthermore, he had obtained self-reports from the participants about whether they

considered themselves to be primarily “morning people” (those who feel better and are more alert in the morning) or “evening people” (those who are more alert in the evening). Bodenhausen (1990) found that participants were more likely to make use of their stereotypes when they were judging the guilt or innocence of the individuals on trial at the time of day when the participants acknowledged that they were normally more fatigued. People who reported being most alert in the morning stereotyped more at night, and vice versa. This experiment thus provides more support for the idea that schemas—in this case, those about social groups—serve, in part, to make our lives easier and that we rely on them when we need to rely on cognitive efficiency—for instance, when we are tired.

Key Takeaways

- Human beings respond to the social challenges they face by relying on their substantial cognitive capacities.
- One outcome of our experiences is the development of mental representations about our environments—schemas and attitudes. Once they have developed, our schemas influence our subsequent learning, such that the new people and situations that we encounter are interpreted and understood in terms of our existing knowledge.
- [Accommodation](#) occurs when existing schemas change on the basis of new information. Assimilation occurs when our knowledge acts to influence new information in a way that makes the conflicting information fit with our existing schemas.
- Because our expectations influence our attention and responses to, and our memory for, new information, often in a way that leads our expectations to be maintained, assimilation is generally more likely than accommodation.
- Schemas serve as energy savers. We are particularly likely to use them when we are tired or when the situation that we must analyze is

complex.

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3.2 How We Use Our Expectations

Learning Objectives

- 1. Provided examples of how salience and accessibility influence information processing.
- 2. Review, differentiate, and give examples of the cognitive heuristics that influence social judgment.
- 3. Summarize and give examples of the importance of social cognition in everyday life.

Once we have developed a set of schemas and attitudes, we naturally use that information to help us judge and respond to others. Our expectations help us think about, size up, and make sense of individuals, groups of people, and the relationships among people. If we have learned, for example, that someone is friendly and interested in us, we are likely to approach them; if we have learned that they are threatening or unlikable, we will be more likely to withdraw. And if we believe that a person has committed a crime, we may process new information in a manner that helps convince us that our judgment was correct. In this section, we will consider how we use our stored knowledge to come to accurate (and sometimes inaccurate) conclusions about our social worlds. Table 3.1 “How Expectations Influence Our Social Cognition” summarizes the concepts that we will discuss, some of the many ways that our existing schemas and attitudes influence how we respond to the information around us.



TABLE 3.1 HOW EXPECTATIONS INFLUENCE OUR SOCIAL COGNITION

Cognitive Process	Description	Example
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Cognitive accessibility	Some schemas and attitudes are more accessible than others.	We may think a lot about our new haircut because it is important to us.
Salience	Some stimuli, such as those that are unusual, colorful, or moving, grab our attention.	We may base our judgments on a single unusual event and ignore hundreds of other events that are more usual.
Representativeness heuristic	We tend to make judgments according to how well the event matches our expectations or stereotypes about what is typical and Not relying on how likely or base rate info.	After a coin has come up heads many times in a row, we may erroneously think that the next flip is more likely to be tails because we “are due.” This is often referred to as the “gambler’s fallacy”
Availability heuristic	Things that come to mind easily tend to be seen as more common.	We may overestimate the crime statistics in our own area because these crimes are so easy to recall.
Anchoring and adjustment	Although we try to adjust our judgments away from them, our decisions are overly based on the things that are most highly accessible in memory.	We may buy more of a product when it is advertised in bulk than when it is advertised as a single item.
Counterfactual thinking	We may “replay” events such that they turn out differently—especially	We may feel particularly bad about events that might not have occurred

	when only minor changes in the events leading up to them make a difference.	if only a small change might have prevented them.
False consensus bias	We tend to see other people as similar to us or agreeing with us more than is objectively warranted.	We are surprised when other people have different political opinions or values.
Overconfidence	We tend to have more confidence in our skills, abilities, and judgments than is objectively warranted.	Eyewitnesses are often extremely confident that their identifications are accurate, even when they are not.

Automatic Versus Controlled Cognition

A good part of both cognition and [social cognition](#) is spontaneous or automatic. [Automatic cognition](#) refers to *thinking that occurs out of our awareness, quickly, and without taking much effort* (Ferguson & Bargh, 2003; Ferguson, Hassin, & Bargh, 2008). The things that we do most frequently tend to become more automatic each time we do them, until they reach a level where they don't really require us to think about them very much. Most of us can ride a bike and operate a television remote control in an automatic way. Even though it took some work to do these things when we were first [learning](#) them, it just doesn't take much effort anymore. And because we spend a lot of time making judgments about others, many of these judgments (and particularly those about people we don't know very well and who don't matter much to us) are made automatically (Willis & Todorov, 2006).

Because automatic thinking occurs outside of our conscious awareness, we frequently have no idea that it is occurring and influencing our judgments or

behaviors. You might remember a time when you came back from your classes, opened the door to your dorm room, and 30 seconds later couldn't remember where you had put your keys! You know that you must have used the keys to get in, and you know you must have put them somewhere, but you simply don't remember a thing about it. Because many of our everyday judgments and behaviors are performed “on automatic,” we may not always be aware that they are occurring or influencing us.

It is of course a good thing that many things operate automatically because it would be a real pain to have to think about them all the time. If you couldn't drive a car automatically, you wouldn't be able to talk to the other people riding with you or listen to the radio at the same time—you'd have to be putting most of your attention into driving. On the other hand, relying on our snap judgments about Bianca—that she's likely to be expressive, for instance—can be erroneous. Sometimes we need to—and should—go beyond [automatic cognition](#) and consider people more carefully. When we deliberately size up and think about something—for instance another person—we call it thoughtful cognition or [controlled cognition](#).

Although you might think that controlled cognition would be more common and that automatic thinking would be less likely, that is not always the case. The problem is that thinking takes effort and time, and we often don't have too much of those things available. As a result, we frequently rely on automatic cognition, and these processes—acting outside of our awareness—have a big effect on our behaviors. In the following Research Focus, we will consider an example of a study that uses a common social cognitive procedure known as [priming](#)—a technique in which information is temporarily brought into memory through exposure to situational events—and that shows that priming can influence judgments entirely out of awareness.

Research Focus

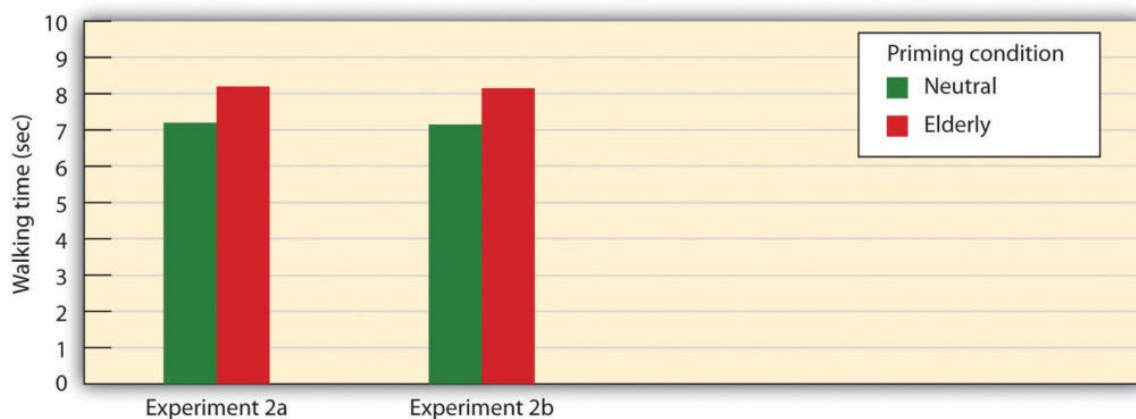
Behavioral Effects of [Priming](#)

In one demonstration of how automatic cognition can influence our behaviors without us being aware of them, John Bargh and his colleagues (Bargh, Chen, & Burrows, 1996) conducted two studies, each with the exact same procedure. In the experiments, they showed college students sets of five scrambled words. The students were to unscramble the five words in each set to make a sentence. Furthermore, for half of the research participants, the words were related to the [stereotype](#) of the elderly. These participants saw words such as “in Florida retired live people” and “bingo man the forgetful plays.”

The other half of the research participants also made sentences but did so out of words that had nothing to do with the elderly stereotype. The purpose of this task was to prime (activate) the schema of elderly people in memory for some of the participants but not for others.

The experimenters then assessed whether the priming of elderly stereotypes would have any effect on the students’ behavior—and indeed it did. When each research participant had gathered all his or her belongings, thinking that the experiment was over, the experimenter thanked him or her for participating and gave directions to the closest elevator. Then, without the participant knowing it, the experimenters recorded the amount of time that the participant spent walking from the doorway of the experimental room toward the elevator. As you can see in the following figure, the same results were found in both experiments—the participants who had made sentences using words related to the elderly stereotype took on the behaviors of the elderly—they walked significantly more slowly (in fact, about 12% more slowly across the two studies) as they left the experimental room.

Figure 2.3 – Automatic Priming and Behavior



In two separate experiments, Bargh, Chen, and Borroughs (1996) found that students who had been exposed to words related to the elderly stereotype walked more slowly than those who had been exposed to more neutral words.

To determine if these priming effects occurred out of the conscious awareness of the participants, Bargh and his colleagues asked a third group of students to complete the priming task and then to indicate whether they thought the words they had used to make the sentences had any relationship to each other or could possibly have influenced their behavior in any way. These students had no awareness of the possibility that the words might have been related to the elderly or could have influenced their behavior.

The point of these experiments, and many others like them, is clear—it is quite possible that our judgments and behaviors are **influenced** by our **social situations**, and this influence may be entirely **outside** of our **conscious awareness**. To return again to Bianca, it is even possible that we notice her nationality and that our beliefs about Italians influence our responses to her, even though we have no idea that they are doing so and really believe that they have not. It is in this way that our stereotypes may have their insidious effects, and it is exactly these processes that may have led to a mistaken eyewitness account in the case of Rickie Johnson.

Salience and Accessibility Determine Which Expectations We Use

We each have a large number of schemas that we might bring to bear on any type of judgment we might make. When thinking about Bianca, for instance, we might focus on her nationality, her gender, her physical attractiveness, her intelligence, or any of many other possible features. And we will react to Bianca differently depending on which schemas we use. Schema activation is determined both by characteristics of the person we are judging—the [salience](#) of the characteristics—and by the current activation of the schema in the individual—the [cognitive accessibility](#) of the schema.

Salience

One determinant of which schemas are likely to be used in social judgment is the extent to which we attend to particular features of the person or situation that we are responding to. We are more likely to judge people on the basis of characteristics that are [salient](#), meaning that they attract our attention when we see something or someone with them. Things that are unusual, negative, colorful, bright, and moving are more salient and thus more likely to be attended to than are things that do not have these characteristics (McArthur & Post, 1977; Taylor & Fiske, 1978).



Which of these people are more salient and therefore more likely to attract your attention?
Erich Ferdinand – The Purger – CC BY 2.0; Hamad AL-Mohannna – Jump – CC BY-ND 2.0;
LethaColleen – Session 5: Finished! – CC BY-NC-ND 2.0.

We are more likely to initially judge people on the basis of their sex, race, age, and physical attractiveness, rather than on, say, their religious orientation or their political beliefs, in part because these features are so salient when we see them (Brewer, 1988). Another thing that makes something particularly salient is its infrequency or unusualness. Because Bianca is from Italy and very few other people in our school are, that characteristic is something that we notice—it is salient, and we are therefore likely to attend to it. That she is also a woman is—at least in this context—less salient.

The salience of the stimuli in our social worlds may sometimes lead us to make judgments on the basis of information that is actually less informative than is other less salient information. Imagine, for instance, that you wanted to buy a new music player for yourself. You've been trying to decide whether to get the iPod or the Zune. You went online and checked out Consumer Reports, and you found that although the players differed on many dimensions, including price, battery life, ability to share music, and so forth, the Zune was nevertheless rated significantly higher by the owners than was the iPod. As a result, you decide to go purchase one the next day. That night, however, you go to a party, and a friend of yours shows you her iPod. You check it out, and it seems really great. You tell her that you were thinking of buying a Zune, and she tells you that you are crazy. She says she knows someone who had one and had a lot of problems—it didn't download music right, the battery went out right after it went out of warranty, and so forth—and that she would never buy one. Would you still buy the Zune, or would you switch your plans?

If you think about this question logically, the information that you just got from your friend isn't really all that important—you now know the opinions of one more person, but that can't really change the overall consumer ratings of the two machines very much. On the other hand, the information your friend gives you and the chance to use her iPod are highly salient. The information is right there in front of you, in your hand, whereas the statistical information from

Consumer Reports is only in the form of a table that you saw on your computer. The outcome in cases such as this is that people frequently ignore the less salient, but more important, information, such as the likelihood that events occur across a large population—these statistics are known as base rates—in favor of the actually less important, but nevertheless more salient, information.

Another case in which we tend to ignore base-rate information *occurs when we use the representativeness heuristic* (remember that heuristic refers to a simplifying strategy that we use to make judgments). The representativeness heuristic *occurs when we base our judgments on information that seems to represent, or match, what we expect as typical, while ignoring more informative base-rate information*. Consider, for instance, the following puzzle. Let’s say that you went to a hospital, and you checked the records of the babies that were born today (Table 3.2 “Using the Representativeness Heuristic”). Which pattern of births do you think that you are most likely to find?

TABLE 2.2 USING THE REPRESENTATIVENESS HEURISTIC

List A	Gender	List B	Gender
6:31 a.m.	Girl	6:31 a.m.	Boy
8:15 a.m.	Girl	8:15 a.m.	Girl
9:42 a.m.	Girl	9:42 a.m.	Boy
1:13 p.m.	Girl	1:13 p.m.	Girl
3:39 p.m.	Boy	3:39 p.m.	Girl
5:12 p.m.	Boy	5:12 p.m.	Boy
7:42 p.m.	Boy	7:42 p.m.	Girl
11:44 p.m.	Boy	11:44 p.m.	Boy

Most people think that list B is more likely, probably because list B looks more random and thus matches (is “representative of”) our ideas about randomness. But statisticians know that any pattern of four girls and four boys is equally

likely and thus that List B is no more likely than List A. The problem is that we have an image of what randomness should be, which doesn't always match what is rationally the case. Similarly, people who see a coin that comes up heads five times in a row will frequently predict (and perhaps even bet!) that tails will be next—it just seems like it has to be. But mathematically, this erroneous expectation (known as the gambler's fallacy) is simply not true: The base-rate likelihood of any single coin flip being tails is only 50%, regardless of how many times it has come up heads in the past.

To take one more example, consider the following information:

I have a friend who is short, shy, and writes poetry. Which of the following is she? (Choose one.)

- A professor of psychology
- A professor of Chinese

Can you see how you might be led, potentially incorrectly, into thinking that my friend is a professor of Chinese? Why? Because the description (“short, shy, and writes poetry”) just seems so representative or stereotypical of our expectations about Chinese people. But the base rates tell us something completely different, which might make us wary. For one, because I am a psychology professor, it's much more likely that I know more psychology professors than Chinese professors. And at least on my campus, the number of professors in the psychology department is much bigger than the number of professors of Chinese. Although base rates suggest that “psychology” would be the right answer, the use of the representative heuristic might lead us (probably incorrectly) to guess “Chinese” instead.

Cognitive Accessibility

Although which characteristics we use to think about objects or people is determined in part by the salience of their characteristics (our perceptions are

influenced by our [social situation](#)), individual differences in the person who is doing the judging are also important (our perceptions are influenced by person variables). People vary in the schemas that they find important to use when judging others and when thinking about themselves. One way to consider this importance is in terms of the cognitive accessibility of the schema. [Cognitive accessibility](#) refers to *the extent to which a schema is activated in memory and thus likely to be used in information processing*.

You probably know people who are golf nuts (or maybe tennis or some other sport nuts). All they can talk about is golf. For them, we would say that golf is a highly accessible construct. Because they love golf, it is important to their self-concept; they set many of their goals in terms of the sport, and they tend to think about things and people in terms of it (“if he plays golf, he must be a good person!”). Other people have highly accessible schemas about eating healthy food, exercising, environmental issues, or really good coffee, for instance. In short, when a schema is accessible, we are likely to use it to make judgments of ourselves and others.

Although accessibility can be considered a person variable (a given idea is more highly accessible for some people than for others), accessibility can also be influenced by situational factors. When we have recently or frequently thought about a given topic, that topic becomes more accessible and is likely to influence our judgments. This is in fact the explanation for the results of the priming study you read about earlier—people walked slower because the concept of elderly had been primed and thus was currently highly accessible for them.

Because we rely so heavily on our schemas (stereotypes) and our attitudes—and particularly on those that are salient and accessible—we can sometimes be overly influenced by them. Imagine, for instance, that I asked you to close your eyes and determine whether there are more words in the English language that begin with the letter R or that have the letter R as the third letter. You would probably try to solve this problem by thinking of words that have each of the characteristics. It turns out that most people think there are more words that

begin with R, even though there are in fact more words that have R as the third letter.

You can see that this error can occur as a result of cognitive accessibility. To answer the question, we naturally try to think of all the words that we know that begin with R and that have R in the third position. The problem is that when we do that, it is much easier to retrieve the former than the latter, because we store words by their first, not by their third, letter. We may also think that our friends are nice people because we see them primarily when they are around us (their friends). And the traffic might seem worse in our own neighborhood than we think it is in other places, in part because nearby traffic jams are more accessible for us than are traffic jams that occur somewhere else.

“We tend to Worry about the Wrong Issues”

And do you think it is more likely that you will be killed in a plane crash or in a car crash? Many people fear the former, even though the latter is much more likely: Your chances of being involved in an aircraft accident are about 1 in 11 million, whereas your chances of being killed in an automobile accident are 1 in 5,000—over 50,000 people are killed on U.S. highways every year. In this case, the problem is that plane crashes, which are highly salient, are more easily retrieved from our memory than are car crashes, which are less extreme.

The tendency to make judgments of the frequency of an event, or the likelihood that an event will occur, on the basis of the ease with which the event can be retrieved from memory is known as the [availability heuristic](#) (Schwarz & Vaughn, 2002; Tversky & Kahneman, 1973). The idea is that things that are highly accessible (in this case, the term availability is used) come to mind easily and thus may overly influence our judgments. Thus, despite the clear facts, it may be easier to think of plane crashes than of car crashes because the former are so highly salient. If so, the availability heuristic can lead to errors in judgments.

Still another way that the cognitive accessibility of constructs can influence information processing is through their effects on [processing fluency](#).

Processing fluency refers to the ease with which we can process information in our environments. When stimuli are highly accessible, they can be quickly attended to and processed, and they therefore have a large influence on our perceptions. This influence is due, in part, to the fact that our body reacts positively to information that we can process quickly, and we use this positive response as a basis of judgment (Reber, Winkielman, & Schwarz, 1998; Schwarz et al., 1991; Winkielman & Cacioppo, 2001).

We are likely to use this type of quick and “intuitive” processing, based on our feelings about how easy it is to complete a task, when we do not have much time or energy for more in-depth processing, such as when we are under time pressure, tired, or unwilling to process the stimulus in sufficient detail. Of course, it is very adaptive to respond to stimuli quickly (Sloman, 2002; Stanovich & West, 2002; Winkielman, Schwarz, & Nowak, 2002), and it is not impossible that in at least some cases, we are better off making decisions based on our initial responses than on a more thoughtful cognitive analysis (Loewenstein, Weber, Hsee, & Welch, 2001). For instance, Dijksterhuis, Bos, Nordgren, and van Baaren (2006) found that when participants were given tasks requiring decisions that were very difficult to make on the basis of a cognitive analysis of the problem, they made better decisions when they didn’t try to analyze the details carefully but simply relied on their unconscious intuition.

In sum, people are influenced not only by the information they get but by how they get it. We are more highly influenced by things that are salient and accessible and thus easily attended to, remembered, and processed. On the other hand, information that is harder to access from memory, is less likely to be attended to, or takes more effort to consider is less likely to be used in our judgments, even if this information is statistically equally informative or even more informative.

The False Consensus Bias Makes Us Think That We Are More Like Others Than We

Really Are

The tendency to base our judgments on the accessibility of social constructs can lead to still other errors in judgment. One such error is known as the [false consensus bias](#): *the tendency to overestimate the extent to which other people are similar to us in their opinions and beliefs*. For instance, if you are in favor of abortion rights, opposed to gun control, and prefer rock music to jazz, then you are likely to think that other people share these beliefs (Ross, Greene, & House, 1977). In one demonstration of the false consensus bias, Joachim Krueger and his colleagues (Krueger & Clement, 1994) gave their research participants, who were college students, a personality test. Then they asked the same participants to estimate the percentage of other students in their school who would have answered the questions the same way that they did. The students who agreed with the items thought that others would agree with them too, whereas the students who disagreed thought that others would also disagree. You can see that the false consensus bias also occurs through the operation of cognitive accessibility: Once we have indicated our own belief, it becomes highly accessible, and it colors our estimates about other people.

Although it is commonly observed, the false consensus bias does not occur on all dimensions. Specifically, *the false consensus bias is Not usually observed on judgments of positive personal traits that we highly value as important*. People (falsely, of course) report that they have better personalities (e.g., a better sense of humor), that they engage in better behaviors (e.g., they are more likely to wear seat belts), and that they have brighter futures than almost everyone else (Chambers, 2008). These results suggest that although in most cases we assume that we are similar to others, in cases of valued personal characteristics the goals of [self-concern](#) lead us to *see ourselves more positively than we see the average person*. “It’s not us!”

Perceptions of What “Might Have Been” Lead to Counterfactual Thinking

In addition to influencing our judgments about ourselves and others, the salience and accessibility of information can have an important effect on our own emotions—for instance, our self-esteem. Our emotional reactions to events are often colored not only by what did happen but also by what might have happened. If we can easily imagine an outcome that is better than what actually happened, then we may experience sadness and disappointment; on the other hand, if we can easily imagine that a result might have been worse than what actually happened, we may be more likely to experience happiness and satisfaction. The *tendency to think about events according to what might have been* is known as [counterfactual thinking](#) (Roese, 1997).

Imagine, for instance, that you were participating in an important contest, and you won the silver medal. How would you feel? Certainly you would be happy that you won, but wouldn't you probably also be thinking a lot about what might have happened if you had been just a little bit better—you might have won the gold medal! On the other hand, how might you feel if you won the bronze medal (third place)? If you were thinking about the counterfactual (the “what might have been”), perhaps the idea of not getting any medal at all would have been highly accessible—you'd be happy that you got the medal you did get.

Medvec, Madey, and Gilovich (1995) investigated exactly this idea by videotaping the responses of athletes who won medals in the 1992 summer Olympic Games. They videotaped the athletes both as they learned that they had won a silver or a bronze medal and again as they were awarded the medal. Then they showed these videos, without any sound, to people who did not know which medal which athlete had won. The raters indicated how they thought the athlete was feeling, on a range from “agony” to “ecstasy.” The results showed that the bronze medalists did indeed seem to be, on average, happier than were the silver medalists. Then in a follow-up study, raters watched interviews with many of these same athletes as they talked about their performance. The raters indicated what we would expect on the basis of counterfactual thinking—the silver medalists talked about their disappointments in having finished second rather than first, whereas the bronze medalists focused on how happy they were to have finished third rather than fourth.



Does the bronze medalist look happier to you than the silver medalist? Medvec, Madey, and Gilovich (1995) found that, on average, bronze medalists were happier than silver medalists.[Wikimedia Commons](#) – CC BY-SA 2.0.

You might have experienced counterfactual thinking in other situations. I remember once that I was driving across the country and my car was having some engine trouble. I really, really wanted to make it home when I got near the end of my journey because I could tell that I was going to be very disappointed if the car broke down only a few miles before I got home (it would have been really easy to have imagined making it the whole way, making it even more painful if I did not). [Counterfactual thinking](#) has even been observed on juries—people who are asked to award monetary damages to others who had been in an accident offered them substantially more in compensation if they were almost not injured than they did if the accident did not seem close to not occurring (Miller, Turnbull, & McFarland, 1988).

Again, the moral of the story is clear—our thinking is frequently influenced by

processes that we are not aware of and that may lead us to make judgments that seem reasonable but are objectively inaccurate. In the case of counterfactual thinking, the cognitive accessibility of the potential alternative outcome leads to some very paradoxical effects.

Anchoring and Adjustment Lead Us to Accept Ideas That We Should Revise

In some cases, we may be aware of the danger of acting on our expectations and attempt to adjust for them. Perhaps you have been in a situation where you are beginning a course with a new professor and you know that a good friend of yours does not like him. You may be thinking that you want to go beyond your negative expectation and prevent this knowledge from biasing your judgment. However, the accessibility of the initial information frequently prevents this adjustment from occurring—leading us to anchor on the initial construct and not adjust sufficiently. This is called the problem of [anchoring and adjustment](#).

Tversky and Kahneman (1974) asked some of the student participants in one of their studies to solve this multiplication problem quickly and without using a calculator:

$$1 \times 2 \times 3 \times 4 \times 5 \times 6 \times 7 \times 8$$

They asked other participants to solve this problem:

$$8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1$$

They found that students who saw the first problem gave an estimated answer of about 512, whereas the students who saw the second problem estimated about 2,250. Tversky and Kahneman argued that the students couldn't solve the whole problem in their head, so they did the first few multiplications and then

used the outcome of this preliminary calculation as their starting point, or anchor. Then the participants used their starting estimate to find an answer that sounded plausible. In both cases, the estimates were too low relative to the true value of the product (which is 40,320)—but the first set of guesses were even lower because they started from a lower anchor.

Of course, savvy marketers have long used the anchoring phenomenon to help them. You might not be surprised to hear that people are more likely to buy more products when they are listed as four for \$1.00 than when they are listed as \$0.25 each (leading people to anchor on the four and perhaps adjust only a bit away) and when a sign says “buy a dozen” rather than “buy one.”

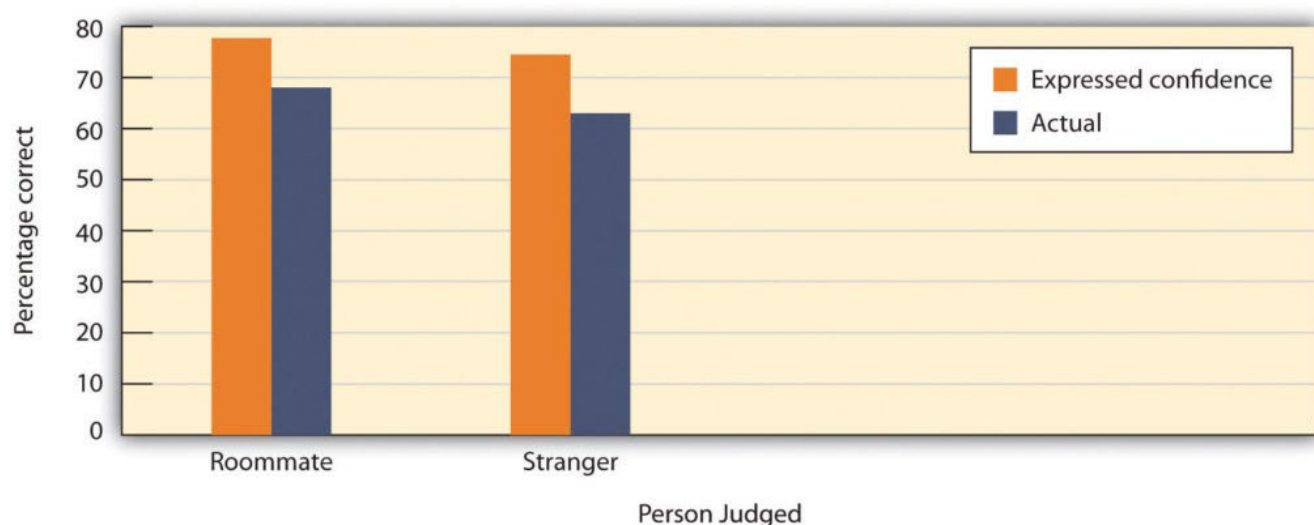
And it is no accident that a car salesperson always starts negotiating with a high price and then works down. The salesperson is trying to get the consumer anchored on the high price with the hope that it will have a big influence on the final sale value.

Overconfidence

Still another potential judgmental bias, and one that has powerful and often negative effects on our judgments, is the tendency to be overconfident in our own skills, abilities, and judgments. We often have little awareness of our own limitations, leading us to act as if we are more certain about things than we should be, particularly on tasks that are difficult. Adams and Adams (1960) found that for words that were difficult to spell, people were correct in spelling them only about 80% of the time, even though they indicated that they were “100% certain” that they were correct. David Dunning and his colleagues (Dunning, Griffin, Milojkovic, & Ross, 1990) asked college students to predict how another student would react in various situations. Some participants made predictions about a fellow student whom they had just met and interviewed, and others made predictions about their roommates. In both cases, participants reported their confidence in each prediction, and accuracy was determined by the responses of the target persons themselves. The results were clear: Regardless of whether they judged a stranger or a roommate, the students

consistently overestimated the accuracy of their own predictions (Figure 3.5).

Figure 3.5



Dunning et al.(1990) found that, regardless of whether they were judging strangers or their roommates, students were overconfident. The percentage confidence that they assigned to their own predictions was significantly higher than the actual percentage of their predictions that were correct.

Making matters even worse, Kruger and Dunning (1999) found that people who scored low rather than high on tests of spelling, logic, grammar, and humor appreciation were also most likely to show overconfidence by overestimating how well they would do. Apparently, poor performers are doubly cursed—they not only are unable to predict their own skills but also are the most unaware that they can’t do so (Dunning, Johnson, Ehrlinger, & Kruger, 2003).

The tendency to be overconfident in our judgments can have some very negative effects. When eyewitnesses testify in courtrooms regarding their memories of a crime, they often are completely sure that they are identifying the right person. But their confidence doesn’t correlate much with their actual accuracy. This is, in part, why so many people have been wrongfully convicted on the basis of inaccurate eyewitness testimony given by overconfident witnesses (Wells & Olson, 2003).

The Importance of Cognitive Biases in

Everyday Life

Perhaps you are thinking that the use of heuristics and the tendency to be influenced by salience and accessibility don't seem that important—who really cares if we buy an iPod when the Zune is better, or if we think there are more words that begin with the letter R than there actually are? These aren't big problems in the overall scheme of things. But it turns out that what seem perhaps to be pretty small errors and biases on the surface can have profound consequences for people. If the errors occur for a lot of people, they can really add up. Why would so many people continue to buy lottery tickets or to gamble their money in casinos when the likelihood of them ever winning is so low? One possibility, of course, is the representative heuristic—people ignore the low base rates of winning and focus their attention on the salient likelihood of winning a huge prize. And the belief in astrology, which all scientific evidence suggests is not accurate, is probably driven in part by the salience of the occasions when the predictions do occur—when a horoscope is correct (which it will of course be sometimes), the correct prediction is highly salient and may allow people to maintain the (overall false) belief.

People may also take more care to prepare for unlikely events than for more likely ones because the unlikely ones are more salient or accessible.

We tend to Worry about the 'Wrong' Issues

For instance, people may think that they are more likely to die from a terrorist attack or as the result of a homicide than they are from diabetes, stroke, or tuberculosis. But the odds are much greater of dying from the health problems than from the terrorism or homicide. Because people don't accurately calibrate their behaviors to match the true potential risks, the individual and societal costs are quite large (Slovic, 2000).

[Salience](#) and accessibility also color how we perceive our social worlds, which may have a big influence on our behavior. For instance, people who watch a lot

of violent television shows also tend to view the world as more dangerous in comparison to those who watch less violent TV (Doob & Macdonald, 1979). This follows from the idea that our judgments are based on the accessibility of relevant constructs. We also overestimate our contribution to joint projects (Ross & Sicoly, 1979), perhaps in part because our own contributions are so obvious and salient, whereas the contributions of others are much less so. And the use of [cognitive heuristics](#) can even affect our views about global warming. Joireman, Barnes, Truelove, and Duell (2010) found that people were more likely to believe in the existence of global warming when they were asked about it on hotter rather than colder days and when they had first been primed with words relating to heat. Thus the principles of salience and accessibility, because they are such an important part of our social judgments, can create a series of biases that can make a difference.

Research has found that even people who should know better—and who need to know better—are subject to cognitive biases. Economists, stock traders, managers, lawyers, and even doctors have been found to make the same kinds of mistakes in their professional activities that people make in their everyday lives (Byrne & McEleney, 2000; Gilovich, Griffin, & Kahneman, 2002; Hilton, 2001). And the use of cognitive heuristics is increased when people are under time pressure (Kruglanski & Freund, 1983) or when they feel threatened (Kassam, Koslov, & Mendes, 2009), exactly the situations that may occur when professionals are required to make their decisions.

Although biases are common, they are not impossible to control, and psychologists and other scientists are working to help people make better decisions. One possibility is to provide people with better feedback. Weather forecasters, for instance, are quite accurate in their decisions, in part because they are able to learn from the clear feedback that they get about the accuracy of their predictions. Other research has found that accessibility biases can be reduced by leading people to consider multiple alternatives rather than focusing only on the most obvious ones, and particularly by leading people to think about exactly the opposite possible outcomes than the ones they are expecting (Hirt, Kardes, & Markman, 2004).

People can also be trained to make better decisions. According to research conducted by Richard Nisbett and colleagues (Fong, Kantz, & Nisbett, 1986; Nisbett, Fong, Lehman, & Cheng, 1987), one of the ways that is most likely to improve social reasoning is to get training with statistics and research design. Also, Nisbett and colleagues (e.g., Lehman, Lempert, & Nisbett, 1988) found that graduate students in medicine, law, and chemistry, but particularly those in psychology, all showed significant improvement in their ability to reason correctly over the course of their graduate training.

Social Psychology in the Public Interest: The Validity of Eyewitness Testimony

As we have seen in the story of Rickie Johnson that opens this chapter, one social situation in which the accuracy of our person-perception skills is vitally important is the area of eyewitness testimony (Charman & Wells, 2007; Toglia, Read, Ross, & Lindsay, 2007; Wells, Memon, & Penrod, 2006). Every year, thousands of individuals such as Rickie Johnson are charged with and often convicted of crimes based largely on eyewitness evidence. In fact, more than 100 people who were convicted prior to the existence of forensic DNA have now been exonerated by DNA tests, and more than 75% of these people were victims of mistaken eyewitness identification (Wells, Memon, & Penrod, 2006; Fisher, 2011).

The judgments of eyewitnesses are often incorrect, and there is only a small correlation between how accurate and how confident an eyewitness is. Witnesses are frequently overconfident, and one who claims to be absolutely certain about his or her identification is not much more likely to be accurate than one who appears much less sure, making it almost impossible to determine whether a particular witness is accurate or not (Wells & Olson, 2003).

To accurately remember a person or an event at a later time, we must be able to accurately see and store the information in the first place, keep it in memory over time, and then accurately retrieve it later. But the social situation can influence any of these processes, causing errors and biases.

In terms of initial encoding of the memory, crimes normally occur quickly, often in situations that are accompanied by a lot of stress, distraction, and arousal. Typically, the eyewitness gets only a brief glimpse of the person committing the crime, and this may be under poor lighting conditions and from far away. And the eyewitness may not always focus on the most important aspects of the scene.

Weapons are highly salient, and if a weapon is present during the crime, the eyewitness may focus on the weapon, which would draw his or her attention away from the individual committing the crime (Steblay, 1997). In one relevant study, Loftus, Loftus, and Messo (1987) showed people slides of a customer walking up to a bank teller and pulling out either a pistol or a checkbook. By tracking eye movements, the researchers determined that people were more likely to look at the gun than at the checkbook and that this reduced their ability to accurately identify the criminal in a lineup that was given later.

People may be particularly inaccurate when they are asked to identify members of a race or ethnicity other than their own (Brigham, Bennett, Meissner, & Mitchell, 2007). In one field study, for example, Meissner and Brigham (2001) sent White, Black, and Hispanic students into convenience stores in El Paso, Texas. Each of the students made a purchase, and the researchers came in later to ask the clerks to identify photos of the shoppers. Results showed that the White, Black, and Mexican American clerks demonstrated the own-race bias: They were all more accurate at identifying customers belonging to their own racial or ethnic group than they were at identifying people from other groups. There seems to be some truth

to the adage that “They all look alike”—at least if an individual is looking at someone who is not of his or her race or ethnicity. (This is particularly likely if one has not encountered many individuals of another ethnicity.)

Even if information gets encoded properly, memories may become distorted over time. For one thing, people might discuss what they saw with other people, or they might read information relating to it from other bystanders or in the media. Such post-event information can distort the original memories such that the witnesses are no longer sure what the real information is and what was provided later. The problem is that the new, inaccurate information is highly cognitively accessible, whereas the older information is much less so. Even describing a face makes it more difficult to recognize the face later (Dodson, Johnson, & Schooler, 1997).

In an experiment by Loftus and Palmer (1974), participants viewed a film of a traffic accident and then, according to random assignment to experimental conditions, answered one of three questions:

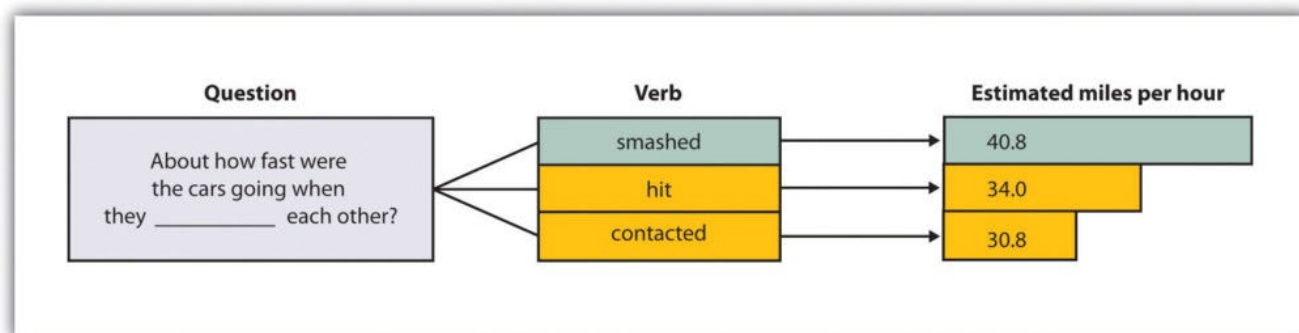
“About how fast were the cars going when they hit each other?”

“About how fast were the cars going when they smashed each other?”

“About how fast were the cars going when they contacted each other?”

As you can see in the following figure, although all the participants saw the same accident, their estimates of the speed of the cars varied by condition. People who had seen the “smashed” question estimated the highest average speed, and those who had seen the “contacted” question estimated the lowest.

Figure 3.6 – Reconstructive Memory



Participants viewed a film of a traffic accident and then answered a question about the accident. According to random assignment, the blank was filled by either “hit,” “smashed,” or “contacted” each other. The wording of the question influenced the participants’ memory of the accident. Data are from Loftus and Palmer (1974).

Participants viewed a film of a traffic accident and then answered a question about the accident. According to random assignment, the blank was filled by either “hit,” “smashed,” or “contacted” each other. The wording of the question influenced the participants’ memory of the accident.

The situation is particularly problematic when the eyewitnesses are children, because research has found that children are more likely to make incorrect identifications than are adults (Pozzulo & Lindsay, 1998) and are also subject to the own-race identification bias (Pezdek, Blandon-Gitlin, & Moore, 2003). In many cases, when sex abuse charges have been filed against babysitters, teachers, religious officials, and family members, the children are the only source of evidence. The likelihood that children are not accurately remembering the events that have occurred to them creates substantial problems for the legal system.

Another setting in which eyewitnesses may be inaccurate is when they try to identify suspects from mug shots or lineups. A lineup generally includes the suspect and five to seven other innocent people (the fillers), and the eyewitness must pick out the true perpetrator. The problem is that eyewitnesses typically feel pressured to pick a suspect out of the lineup, which increases the likelihood that they will mistakenly pick someone (rather than no one) as the suspect

(Gary Wells).

Research has attempted to better understand how people remember and potentially misremember the scenes of and people involved in crimes and to attempt to improve how the legal system makes use of eyewitness testimony. In many states, efforts are being made to better inform judges, juries, and lawyers about how inaccurate eyewitness testimony can be. Guidelines have also been proposed to help ensure that child witnesses are questioned in a nonbiasing way (Poole & Lamb, 1998). Steps can also be taken to ensure that lineups yield more accurate eyewitness identifications. Lineups are more fair when the fillers resemble the suspect, when the interviewer makes it clear that the suspect might or might not be present (Steblay, Dysart, Fulero, & Lindsay, 2001), and when the eyewitness has not been shown the same pictures in a mug-shot book prior to the lineup decision. And several recent studies have found that witnesses who make accurate identifications from a lineup reach their decision faster than do witnesses who make mistaken identifications, suggesting that authorities must take into consideration not only the response but how fast it is given (Dunning & Perretta, 2002; Gary Wells).

In addition to distorting our memories for events that have actually occurred, misinformation may lead us to falsely remember information that never occurred. Loftus and her colleagues asked parents to provide them with descriptions of events that did (e.g., moving to a new house) and did not (e.g., being lost in a shopping mall) happen to their children. Then (without telling the children which events were real or made-up) the researchers asked the children to imagine both types of events. The children were instructed to “think real hard” about whether the events had occurred (Ceci, Huffman, Smith, & Loftus, 1994). More than half of the children generated stories regarding at least one of the made-up events, and they remained insistent that the events did in fact occur even when told by the researcher that they could not possibly have occurred (Loftus & Pickrell, 1995). Even college students are susceptible to manipulations that make events that did not actually occur seem as if they did (Mazzoni, Loftus, & Kirsch, 2001).

The ease with which memories can be created or implanted is particularly problematic when the events to be recalled have important consequences. Therapists often argue that patients may repress memories of traumatic events they experienced as children, such as childhood sexual abuse, and then recover the events years later as the therapist leads them to recall the information—for instance, by using dream interpretation and hypnosis (Brown, Schefflin, & Hammond, 1998).

But other researchers argue that painful memories such as sexual abuse are usually very well remembered, that few memories are actually repressed, and that even if they are, it is virtually impossible for patients to accurately retrieve them years later (McNally, Bryant, & Ehlers, 2003; Pope, Poliakoff, Parker, Boynes, & Hudson, 2007). These researchers have argued that the procedures used by the therapists to “retrieve” the memories are more likely to actually implant false memories, leading the patients to erroneously recall events that did not actually occur. Because hundreds of people have been accused, and even imprisoned, on the basis of claims about “recovered memory” of child sexual abuse, the accuracy of these memories has important societal implications. Many psychologists now believe that most of these claims of recovered memories are due to implanted, rather than real, memories (Loftus & Ketcham, 1994).

Taken together, then, the problems of eyewitness testimony represent another example of how social cognition—the processes that we use to size up and remember other people—may be influenced, sometimes in a way that creates inaccurate perceptions, by the operation of salience, cognitive accessibility, and other information-processing biases.

Key Takeaways

- We use our schemas and attitudes to help us judge and respond to others. In many cases, this is appropriate, but our expectations can also lead to biases in our judgments of ourselves and others.

A good part of our social cognition is spontaneous or automatic, operating without much thought or effort. On the other hand, when we have the time and the motivation to think about things carefully, we may engage in thoughtful, controlled cognition.

- Which expectations we use to judge others is based on both the situational salience of the things we are judging and the cognitive accessibility of our own schemas and attitudes.
- Variations in the accessibility of schemas lead to biases such as the availability heuristic, the representativeness heuristic, the false consensus bias, and biases caused by counterfactual thinking.
- The potential biases that are the result of everyday social cognition can have important consequences, both for us in our everyday lives but even for people who make important decisions affecting many other people. Although biases are common, they are not impossible to control, and psychologists and other scientists are working to help people make better decisions.
- The operation of cognitive biases, including the potential for new information to distort information already in memory, can help explain the tendency for eyewitnesses to be overconfident and frequently inaccurate in their recollections of what occurred at crime scenes.

Chapter Summary

This chapter has focused primarily on one of the three ABCs (Affect, Behaviors, & Cognition) of [social psychology](#), namely, the ways that we learn about and judge other people—our social cognition. The ability to make accurate judgments about our social situation is critical: If we cannot understand others and predict how they will respond to us, our social interactions will be difficult indeed.

We have seen that social cognition is efficient, frequently operating quickly and even out of our awareness, and generally accurate. However, although we are pretty good at sizing up other people and in creating effective social

interactions, we are not perfect. The errors we make frequently occur because of our reliance on our mental knowledge (our schemas, stereotypes, and attitudes) as well our tendency to take shortcuts through the use of cognitive heuristics. We use schemas and heuristics as energy and time savers, because we are often overwhelmed by the amount of information we need to process.

Social knowledge is gained as the result of learning—the relatively permanent change in thoughts, feelings, or behavior that occurs as a result of experience. Some learning is based on the principles of operant learning—experiences that are followed by positive emotions (rewards) are more likely to be repeated, whereas experiences that are followed by negative emotions (punishments) are less likely to be repeated. Associational learning occurs when an object or event comes to be associated with a response, such as a behavior or a positive or negative emotion. We also learn through observational learning by modeling the behavior of others.

[Accommodation](#) occurs when our existing schemas or attitudes change on the basis of new information. [Assimilation](#), on the other hand, occurs when our existing knowledge influences new information in a way that makes the conflicting information fit with our existing knowledge.

Much of our social cognition is automatic, meaning that it occurs quickly and without taking much effort. In other cases, when we have the time and motivation, we think about things more deliberately and carefully. In this case, we are engaging in more thoughtful, controlled cognition.

We pay particular attention to stimuli that are salient—things that are unique, negative, colorful, bright, and moving. In many cases, we base our judgments on information that seems to represent, or match, what we expect is typical and Not take into account how likely it is to occur. When we do so, we are using the representativeness heuristic and Not taking into account base rate information.

Cognitive accessibility refers to the extent to which knowledge is easily activated in conscious memory and thus likely to be used to guide our reactions

to others. The tendency to overuse accessible social constructs can lead to errors in judgment, such as the availability heuristic and the false consensus bias. Counterfactual thinking about what might have happened and the tendency to anchor on an initial construct and not adjust sufficiently from it are also influenced by cognitive accessibility.

You can use your understanding of social cognition to better understand how you think accurately—but also inaccurately—about yourself and others.

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Chapter 4: Perceiving Others

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4.0 Perceiving Others

Detecting Deception: Can Observers at U.S. Airports Detect Terrorist Intent?

Although the U.S. Transportation Security Administration (TSA) makes use of thorough luggage searches and full-body scanners at airport checkpoints, you might wonder why the agency does not attempt to observe the behaviors of waiting passengers as the corresponding agency in Israel does.

The rationale behind profiling the behavior of passengers is that it is better to detect terrorists who are planning to attack than to attempt to detect the weapons themselves (remember that the 9/11 hijackers were armed only with box cutters.)

The U.S. Screening Passengers by Observation Techniques (SPOT) program was designed to do just that. The program has deployed about 3,000 behavior detection officers in 161 U.S. airports to look for people displaying suspicious behavior. The officers normally work in pairs, observing passengers' behavior as they wait in the security line. On average, the officers have less than a minute to assess whether a passenger in line could have malicious intent.

One major flaw of the program is the difficulty of quickly determining who is likely to be a terrorist. From late May 2004 through August 2008, the



agents observed about two billion passengers. Out of the two billion, 151,943 people were sent to secondary screening because of a SPOT referral; from those, 14,104 were chosen for more intense scrutiny. In the end, law enforcement officers arrested only 1,083 referred passengers.

Furthermore, according to a recent report, during that same time period at least 16 alleged terrorists were said to have traveled out of a SPOT airport on at least 23 different occasions without being pulled out of line for inspection.

Source: Harwood, M. (2010, December 23). \$385 million TSA Program fails to detect terrorists: Behavioral profiling program is pseudoscience. BanderasNews. Retrieved from <http://www.banderasnews.com/1012/edat-tsa23.htm>.

Although most of us do not need to attempt to detect who is or is not likely to be a terrorist, we all see and meet new people every day, and we make countless decisions about how to react to them. Some of these people are not particularly significant to us—the unknown pedestrians we pass on the sidewalk or the checkout clerk at the grocery, for instance. In these cases, our interactions might be on a fairly superficial level—we might just engage in a quick transaction, nod our head in passing, exchange pleasantries, or accomplish some relatively limited tasks with the person before we move on. Interactions like these are going to involve mostly spontaneous processing on our part, and therefore they may be subject to some errors and biases.

On the other hand, there are people whom we cannot or do not wish to ignore—our family, friends, bosses, and teachers, for example. We might wonder whether the attractive person at the movies has a current partner or whether our new [social psychology](#) professor is going to be an easy or hard grader. We might suspect that our boss or best friend is angry at us and wonder if we did something wrong and how we might rectify the situation. In these cases, we are more thoughtful—these individuals have meaning for us because they are essential in helping us meet the important goals of protecting the self and

relating to others. We think carefully about how our boss is feeling toward us and our work because we really want and need to know whether we are doing a good enough job.

In this chapter, we will consider how we make sense of other people, including the initial and often intuitive impressions that we rely on so heavily. Then we will turn to the process of [causal attribution](#), with the goal of understanding how we infer what other people are really like by observing their behaviors. Finally, we will consider how accurate we are in making our determinations about others and will examine the differences among people in their person-perception styles. When we are finished, you will have a better idea of how we make our judgments about other people, and this insight may enable you to perceive others more accurately.

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4.1 Initial Impression Format. →

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4.1 Initial Impression Formation

Learning Objectives

1. Describe how people use behaviors and traits to form initial perceptions of others.

People are very skilled at [person perception](#)—*the process of [learning](#) about other people*—and our brains are designed to help us judge others efficiently (Haselton & Funder, 2006; Macrae, 2010). Infants prefer to look at faces of people more than they do other visual patterns, and children quickly learn to identify people and their emotional expressions (Turati, Cassia, Simion, & Leo, 2006). As adults, we are able to identify and remember an unlimited number of people as we navigate our social environments (Haxby, Hoffman, & Gobbini, 2000), and we form impressions of those others quickly and without much effort (Carlston & Skowronski, 2005; Fletcher-Watson, Findlay, Leekam, & Benson, 2008). Furthermore, our first impressions are, at least in some cases, remarkably accurate (Ambady, Bernieri, & Richeson, 2000).

Research Focus

Forming Impressions from Thin Slices

Although it might seem surprising, social psychological research has demonstrated that at least in some limited situations, people can



draw remarkably accurate conclusions about others on the basis of very little data and that they can do this very quickly. (Rule & Ambady, 2010; Rule, Ambady, Adams, & Macrae, 2008; Rule, Ambady, & Hallett, 2009).

Ambady and Rosenthal (1993) made videotapes of six female and seven male graduate students while they were teaching an undergraduate course. The courses covered diverse areas of the college curriculum, including humanities, social sciences, and natural sciences. For each instructor, three 10-second video clips were taken—10 seconds from the first 10 minutes of the class, 10 seconds from the middle of the class, and 10 seconds from the last 10 minutes of the class.

Nine female undergraduates were asked to rate the 39 clips of the instructors individually on 15 dimensions, including optimistic, confident, active, enthusiastic, dominant, likable, warm, competent, and supportive. Ambady and her colleagues then compared the ratings of the instructors made by the participants who had seen the instructors for only 30 seconds with the ratings of the same instructors that had been made by actual students who had spent a whole semester with the instructors and who had rated them at the end of the semester on dimensions such as “the quality of the course section” and “the section leader’s performance.” The researchers found that the ratings of the participants and the ratings of the students were highly positively correlated.

If the finding that we can make accurate judgments about other people in only 30 seconds surprises you, then perhaps you will be even more surprised to learn that we do not even need that much time. Willis and Todorov (2006) found that even a tenth of a second was enough to make judgments that correlated highly with the same judgments made by other people who were given several minutes to make the judgments. Other research has found that we can make

accurate judgments in seconds or even milliseconds about, for instance, the personalities of salespersons (Ambady, Krabbenhoft, & Hogan, 2006) and even whether or not a person is prejudiced (Richeson & Shelton, 2005).

Todorov, Mandisodza, Goren, and Hall (2005) reported a demonstration of just how important such initial impressions can be. These researchers showed participants pairs of political candidates who had run against each other in previous elections for the U.S. Senate and House of Representatives. Participants saw only the faces of the candidates, and they saw them in some cases for only one second. Their task was to judge which person in of each pair was the most competent. Todorov et al. (2005) found that these judgments predicted the actual result of the election, such that 68% of the time the person judged to have the most competent face won.

Rule and Ambady (2010) showed that perceivers were also able to accurately distinguish whether people were Democrats or Republicans based only on photos of their faces. Republicans were perceived as more powerful than Democrats, and Democrats were perceived as warmer than Republicans. And Rule, Ambady, Adams, and Macrae (2008) found that people could accurately determine the sexual orientation of faces presented in photos (gay or straight) based on their judgments of what they thought “most people” would say.

Taken together, these data confirm that we can form a wide variety of initial impressions of others quickly and, at least in some cases, quite accurately. Of course, in these situations (unlike those faced by airport security guards), the people who were being observed were not trying to hide their personalities from the observers.

Social Psychology in the Public Interest

Detecting Deception

One important person-perception task that we must all engage in sometimes is to try to determine whether other people are lying to us. We might wonder whether our poker opponent is bluffing, whether our partner is being honest when she tells us she loves us, or whether our boss is really planning to give us the promotion she has promised. This task is particularly important for members of courtroom juries, who are asked determine the truth or falsehood of the testimony given by witnesses. American jurors are instructed to judge the person's truthfulness by considering his or her "demeanor upon the witness stand" and "manner of testifying" (Judicial Committee on Model Jury Instructions for the Eighth Circuit, 2002, p. 53). And detecting deception is perhaps even more important for those whose job is to provide public security. How good are professionals, such as airport security officers, police detectives, and members of the CIA, FBI, and U.S. Secret Service, at determining whether or not someone is telling the truth?

It turns out that the average person is only moderately good at detecting deception and that experts do not seem to be much better. In a recent [meta-analysis](#), researchers looked at over 200 studies that had tested the ability of almost 25,000 people to detect deception (Bond & DePaulo, 2006). The researchers found that people were just better than chance at doing so but were not really that great. The participants in the studies were able to correctly identify lies and truths about 54% of the time (chance performance is 50%). This is not a big advantage, but it is one that could have at least some practical consequences and that suggests that we can at least detect some deception. However, the meta-analysis also found that experts—including police officers, detectives, judges, interrogators, criminals, customs officials, mental health professionals, polygraph examiners, job interviewers, federal agents, and auditors—were Not significantly better at detecting deception than were nonexperts. These

findings seem consistent with the failure of the agents discussed in the chapter opener who attempted to spot potential hijackers at U.S. airports.

Why is it so difficult for us to detect liars? One reason is that people do not expect to be lied to. Most people are good and honest folks, we expect them to tell the truth, and we tend to give them the benefit of the doubt (Buller, Stiff, & Burgoon, 1996; Gilbert, Krull, & Malone, 1990). In fact, people are more likely to expect deception when they view someone on a videotape than when they are having an interpersonal interaction with the person. It's as if we expect the people who are right around us to be truthful (Bond & DePaulo, 2006).

A second reason is that most people are pretty good liars. The cues that liars give off are quite faint, particularly when the lies that they are telling are not all that important.

Bella DePaulo and her colleagues (DePaulo et al., 2003) found that in most cases, it was very difficult to tell if someone was lying, although it was easier when the liar was trying to cover up something important (e.g., a sexual transgression) than when he or she was lying about something less important. De Paulo and her colleagues did find, however, that there were some reliable cues to deception.

Compared with truth tellers, liars

- made more negative statements overall,
- appeared more tense,
- provided fewer details in their stories,
- gave accounts that were more indirect and less personal,
- took longer to respond to questions and exhibited more silent pauses when they were not able to prepare their responses,
- gave responses that were briefer and spoken in a higher pitch.
- A third reason it is difficult for us to detect liars is that we tend to think we are better at catching lies than we actually are. This overconfidence

may prevent us from working as hard as we should to try to uncover the truth.

Finally, most of us do not really have a very good idea of how to detect deception—we tend to pay attention to the wrong things. Many people think that a person who is lying will avert his or her gaze or will not smile or that perhaps he or she will smile too much. But it turns out that faces are not that revealing. The problem is that liars can more easily control their facial expressions than they can control other parts of their bodies. In fact, Ekman and Friesen (1974) found that people were better able to detect other people's true emotions when they could see their bodies but not their faces than when they could see their faces but not their bodies. Although we may think that deceivers do not smile when they are lying, it is actually common for them to mask their statements with false smiles—smiles that look very similar to the more natural smile that we make when we are really happy (Ekman & Davidson, 1993; Frank & Ekman, 1993).

Recently, new advances in technology have begun to provide new ways to assess deception. Some new software analyzes the language of truth tellers, other software analyzes facial microexpressions that are linked with lying (Newman, Pennebaker, Berry, & Richards, 2003), and still other software uses neuroimaging techniques to try to catch liars (Langleben et al., 2005). Whether these techniques will be successful, however, remains to be seen.

The Importance of the Central Traits Warm and Cold

Although the averaging model is quite good at predicting final impressions, it is not perfect. This is because some traits are simply weighted more heavily than others. For one, negative information is more heavily weighted than is positive information (Rozin & Royzman, 2001). In addition to the heavy weight that we give to negative traits, we give a particular emphasis to the traits “warm” and “cold.” Imagine two men, Brad and Phil, who were described with these two

sets of characteristics:

Brad is industrious, critical, warm, practical, and determined.

Phil is industrious, critical, cold, practical, and determined.

As you can see, the descriptions are identical except for the presence of “warm” and “cold.” Solomon Asch (1946) found that people described with these two sets of traits were perceived very differently—the “warm” person very positively and the “cold” person very negatively.

To test whether or not these differences would influence real behavior, Harold Kelley (1950) had students read about a professor who was described either as “rather cold” or as “very warm.” Then the professor came into the classroom and led a 20-minute discussion group with the students. Although the professor behaved in the same way for both groups, the students nevertheless reacted very differently to him. The students who were expecting the “warm” instructor were more likely to participate in the discussion, in comparison with those who were expecting him to be “cold.” And at the end of the discussion, the students also rated the professor who had been described as “warm” as being significantly more humorous, sociable, popular, and better natured than the “cold” professor. Moreover, the effects of warmth and coolness seem to be wired into our bodily responses. Research has found that even holding a cup of hot, versus iced, coffee or making judgments in warm, versus cold, rooms leads people to judge others more positively (Ijzerman & Semin, 2009; Williams & Bargh, 2008).

In short, the particular dimension **warm versus cold** makes a big difference in how we perceive people—much bigger than do other traits. As a result, the traits of warm and cold are known as central traits (Asch, 1946). The powerful influence of central traits is due to two things. For one, they lead us to make inferences about other traits that might not have been mentioned. The students

who heard that the professor was “warm” might also have assumed that he had other positive traits (maybe “nice” and “funny”), in comparison with those who heard that he was “cold.” Second, the important central traits also color our perceptions of the other traits that surround them. When a person is described as “warm” and “intelligent,” the meaning of “intelligent” seems a lot better than does the term “intelligent” in the context of a person who is also “cold.” Overall, the message is clear: If you want to get someone to like you, try to act in a warm manner toward them. Be friendly, nice, and interested in what they say. This attention you pay to the other will be more powerful than any other characteristics that you might try to display to them.

First Impressions Matter: The Primacy Effect

It has frequently been said that “**first impressions matter.**” Social psychological research supports this idea. Information that we learn first is weighted more heavily than is information that comes later. This is known as the [primacy effect](#). One demonstration of the primacy effect was conducted by Solomon Asch (1946). In his research, participants learned some traits about a person and then made judgments about him. One half of the participants saw this list of traits:

intelligent, industrious, impulsive, critical, stubborn, envious

The other half of the participants saw this list:

envious, stubborn, critical, impulsive, industrious, intelligent

You may have noticed something interesting about these two lists—they contain exactly the same traits but in reverse order.

Asch discovered something interesting in his study: Because the traits were the same, we might have expected that both groups would form the same impression of the person, but this was not at all the case. Rather, Asch found that the participants who heard the first list, in which the positive traits came first, formed much more favorable impressions than did those who heard the second list, in which the negative traits came first. Similar findings were found by Edward Jones (1968), who had participants watch one of two videotapes of a woman taking an intelligence test. In each video, the woman correctly answered the same number of questions and got the same number wrong. However, when the woman got most of her correct answers in the beginning of the test but got more wrong near the end, she was seen as more intelligent than when she got the same number correct but got more correct at the end of the test.

Primacy effects also show up in other domains, even in those that seem really important. For instance, Koppell and Steen (2004) found that in elections in New York City, the candidate who was listed first on the ballot was elected more than 70% of the time, and Miller and Krosnick (1998) found similar effects for candidate preferences in laboratory studies.

This is not to say that it is always good to be first. In some cases, the information that comes last can be most influential. Recency effects, in which information that comes later is given more weight, although much less common than primacy effects, may sometimes occur. For example, Bruine de Bruin (2005) found that in competitions such as the Eurovision Song Contest and ice skating, higher marks were given to competitors who performed last.

Considering the primacy effect in terms of the cognitive processes central to human information processing leads us to understand why it can be so powerful. For one, humans are cognitive misers. Because we desire to conserve our energy, we are more likely to pay more attention to the information that comes first and less likely to attend to information that comes later. In fact, when people read a series of statements about a person, the amount of time they spend reading the items declines with each new piece of information (Belmore & Hubbard, 1987). Not surprisingly, then, we are more likely to show

the primacy effect when we are tired than when we are wide awake and when we are distracted than when we are paying attention (webster, Richter, & Kruglanski, 1996).

Another reason for the primacy effect is that the early traits lead us to form an initial expectancy about the person, and once that expectancy is formed, we tend to process information in ways that keep that expectancy intact. This of course is a classic case of assimilation—once we have developed a schema, it becomes difficult to change it. If we learn that a person is “intelligent” and “industrious,” those traits become cognitively accessible, which leads us to develop an expectancy about the person. When the information about the negative features comes later, these negatives will be assimilated into the existing knowledge more than the existing knowledge is accommodated to fit the new information. Once we have formed a positive impression, the new negative information just doesn’t seem as bad as it might have been had we learned it first. On the other hand, if we learn the negatives first, the opposite happens—the positives don’t seem so positive when we get to them.

You can be sure that it would be good to take advantage of the primacy effect if you are trying to get someone to like you or to secure a job. Begin with your positive characteristics, and only bring the negatives up later. This will create a much better outcome than beginning with the negatives. And if your instructor is going to write a recommendation letter for you, she’ll likely do the same thing—she’ll put your good qualities first and save the poorer ones (if you have any!) for the second page of the letter.

Key Takeaways

- Every day we must size up the people we interact with. The process of doing this is known as person perception.
- We can form a wide variety of initial impressions of others quickly and often quite accurately.
- People are **Not** very **good** at **detecting deception**, and experts are

Not usually much better than the average person.

- The primacy effect occurs because we pay more attention to information that comes first and also because initial information colors how we perceive information that comes later.

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4.2 Inferring Dispositions Using Causal Attribution

Learning Objectives

1. Review the fundamental principles of causal attribution.
2. Compare and contrast the tendency to make person attributions for unusual events, the covariation principle, and Weiner's model of success and failure.
3. Describe some of the factors that lead to inaccuracy in causal attribution.

We have seen that we use personality traits to help us understand and communicate about the people we know. But how do we know what traits people have? People don't walk around with labels saying "I am generous" or "I am aggressive" on their foreheads. In some cases, we may learn about a person indirectly, for instance, through the comments that other people make about that person. We also use the techniques of [person perception](#) to help us learn about people and their traits by observing them and interpreting their behaviors. If Frank hits Joe, we might conclude that Frank is aggressive. If Leslie leaves a big tip for the waitress, we might conclude that Leslie is generous. It seems natural and reasonable to make such inferences because we can assume (often, but not always, correctly) that behavior is caused by personality. It is Frank's aggressiveness that causes him to hit, and it is Leslie's generosity that led to her big tip.



Although we can sometimes infer personality by observing behavior, this is not always the case. Remember that behavior is influenced by both our personal characteristics and the social context in which we find ourselves. What this means is that the behavior we observe other people engaging in might not always be that reflective of their personality—the behavior might have been caused by the situation rather than by underlying person characteristics. Perhaps Frank hit Joe not because he is really an aggressive person but because Joe insulted or provoked him first. And perhaps Leslie left a big tip in order to impress her friends rather than because she is truly generous.

Because behavior is determined by both the person and the situation, we must attempt to determine which of these two causes mainly determined the behavior. The process of trying to determine the causes of people's behavior is known as [causal attribution](#) (Heider, 1958). Because we cannot see personality, we must work to infer it. When a couple we know breaks up, despite what seemed to be a match made in heaven, we are naturally curious. What could have caused the breakup? Was it something one of them said or did? Or perhaps stress from financial hardship was the culprit?

Making a causal attribution is a bit like conducting a [social psychology](#) experiment. We carefully observe the people we are interested in, and we note how they behave in different social situations. After we have made our observations, we draw our conclusions. We make a personal (or internal or dispositional) attribution when we decide that the behavior was caused primarily by the person. A [personal attribution](#) might be something like “I think they broke up because Sarah was not committed to the relationship.” At other times, we may determine that the behavior was caused primarily by the situation—we call this making a situational (or external) attribution. A [situational attribution](#) might be something like “I think they broke up because they were under such financial stress.” At yet other times, we may decide that the behavior was caused by both the person and the situation.

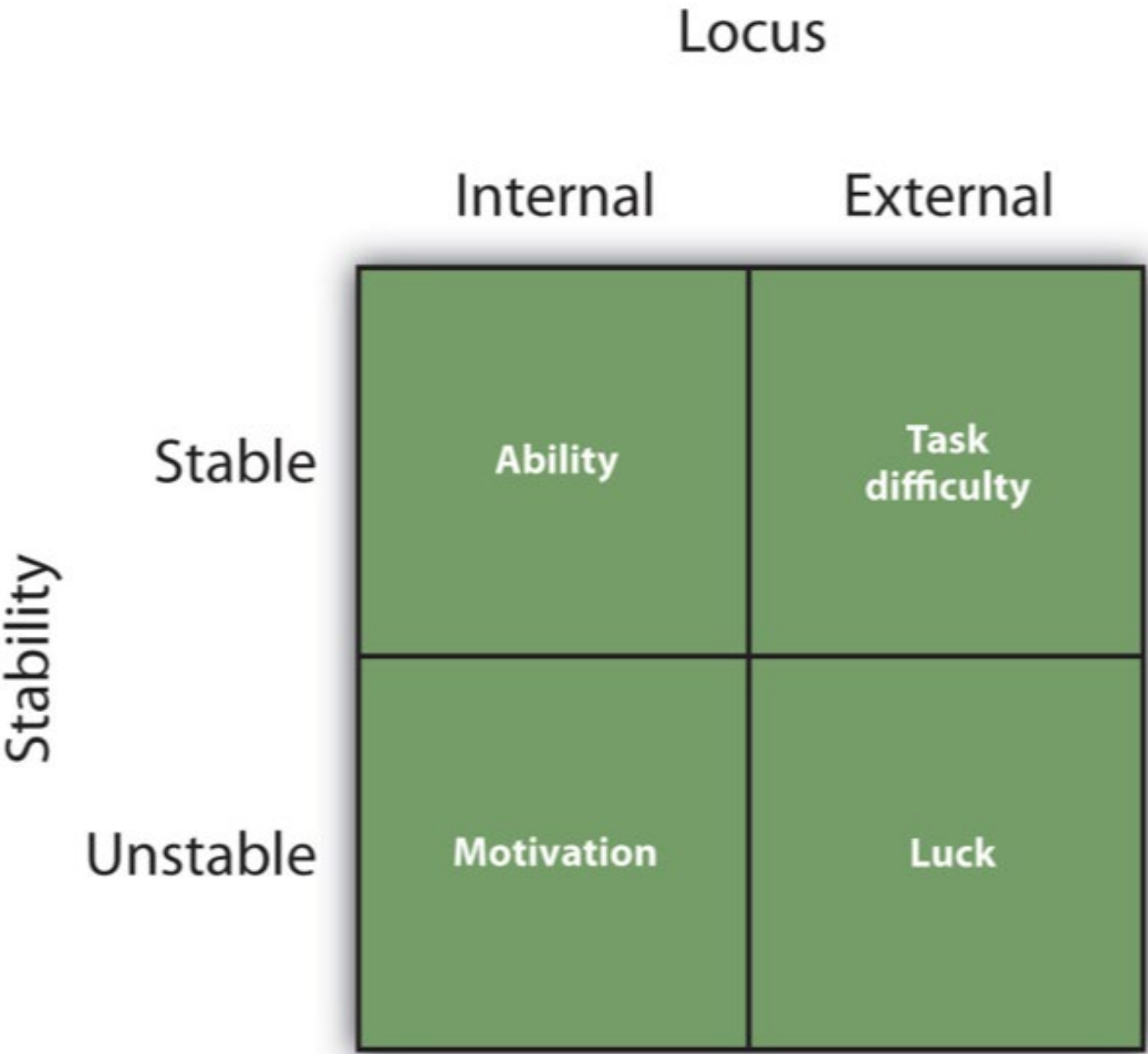
Attributions for Success and Failure

Still another time when we may use our powers of causal attribution to help us determine the causes of events is when we attempt to determine why we or others have succeeded or failed at a task. Think back for a moment to a test that you took, or perhaps about another task that you performed, and consider why you did either well or poorly on it. Then see if your thoughts reflect what Bernard **Weiner** (1985) considered to be the important factors in this regard.

Weiner was interested in how we determine the causes of success or failure because he felt that this information was particularly important for us: Accurately determining why we have succeeded or failed will help us see which tasks we are at good at already and which we need to work on in order to improve. Weiner also proposed that we make these determinations by engaging in causal attribution and that the outcomes of our decision-making process were made either to the person (“I succeeded/failed because of my own person characteristics”) or to the situation (“I succeeded/failed because of something about the situation”).

Weiner’s analysis is shown in Figure 4.5 “Attributions for Success and Failure”. According to Weiner, success or failure can be seen as coming from personal causes (ability or motivation) or from situational causes (luck or task difficulty). However, he also argued that those personal and situational causes could be either stable (less likely to change over time) or unstable (more likely to change over time).

Figure 4.5 – Attributions for Success and Failure



Locus considers whether the attributions are to the person or to the situation, and stability considers whether or not the situation is likely to remain the same over time. This figure shows the potential attributions that we can make for our, or for other people's, success or failure. Locus considers whether the attributions are to the person or to the situation, and Stability considers whether or not the situation is likely to remain the same over time.

If you did well on a test because you are really smart, then this is a personal and stable attribution of ability. It's clearly something that is caused by you personally, and it is also a stable cause—you are smart today, and you'll probably be smart in the future. However, if you succeeded more because you studied hard, then this is a success due to motivation. It is again personal or internal (you studied), but it is also unstable (although you studied really hard

for this test, you might not work so hard for the next one). Weiner considered task difficulty to be a situational cause—you may have succeeded on the test because it was easy, and he assumed that the next test would probably be easy for you too (i.e., that the task, whatever it is, is always either hard or easy). Finally, Weiner considered success due to luck (you just guessed a lot of the answers correctly) to be a situational cause, but one that was more unstable than task difficulty.

It turns out that although Weiner’s attributions do not always fit perfectly (e.g., task difficulty may sometimes change over time and thus be at least somewhat unstable), the four types of information pretty well capture the types of attributions that people make for success and failure.

Overemphasizing the Role of the Person

One way that our attributions are biased is that we are often too quick to attribute the behavior of other people to something personal about them rather than to something about their situation. This is a classic example of the general human tendency of underestimating how important the [social situation](#) really is in determining behavior. This bias occurs in two ways. First, we are too likely to make strong personal attributions to account for the behavior that we observe others engaging in. That is, we are more likely to say “Leslie left a big tip, so she must be generous” than “Leslie left a big tip, but perhaps that was because she was trying to impress her friends.” Second, we also tend to make more personal attributions about the behavior of others (we tend to say “Leslie is a generous person”) than we do for ourselves (we tend to say “I am generous in some situations but not in others”). Let’s consider each of these biases (the [fundamental attribution error](#) and the [actor-observer difference](#)) in turn.

When we explain the behavior of others, *we tend to overestimate the role of person factors and overlook the impact of situations*. In fact, the tendency to do so is so common that it is known as **the fundamental attribution error** ([correspondence bias](#)).

In one demonstration of the fundamental attribution error, Linda Skitka and her colleagues (Skitka, Mullen, Griffin, Hutchinson, & Chamberlin, 2002) had participants read a brief story about a professor who had selected two student volunteers to come up in front of a class to participate in a trivia game. The students were described as having been randomly assigned to the role of a quizmaster or of a contestant by drawing straws. The quizmaster was asked to generate five questions from his idiosyncratic knowledge, with the stipulation that he knew the correct answer to all five questions.

Joe (the quizmaster) subsequently posed his questions to the other student (Stan, the contestant). For example, Joe asked, “What cowboy movie actor’s sidekick is Smiley Burnette?” Stan looked puzzled and finally replied, “I really don’t know. The only movie cowboy that pops to mind for me is John Wayne.” Joe asked four additional questions, and Stan was described as answering only one of the five questions correctly. After reading the story, the students were asked to indicate their impression of both Stan’s and Joe’s intelligence.

If you think about the setup here, you’ll notice that the professor has created a situation that can have a big influence on the outcomes. Joe, the quizmaster, has a huge advantage because he got to choose the questions. As a result, the questions are hard for the contestant to answer. But did the participants realize that the situation was the cause of the outcomes? They did not. Rather, the students rated Joe as significantly more intelligent than Stan. You can imagine that Joe just seemed to be really smart to the students; after all, he knew all the answers, whereas Stan knew only one of the five. But of course this is a mistake. The difference was not at all due to person factors but completely to the situation—Joe got to use his own personal store of esoteric knowledge to create the most difficult questions he could think of. The observers committed the fundamental attribution error and did not sufficiently take the quizmaster’s situational advantage into account.

The fundamental attribution error involves a bias in how easily and frequently we make personal versus situational attributions to others. Another, similar way that we overemphasize the power of the person is that *we tend to make*

more personal attributions for the behavior of others than we do for ourselves and to make more situational attributions for our own behavior than for the behavior of others. This is known as **the actor-observer**

difference (Nisbett, Caputo, Legant, & Marecek, 1973; Pronin, Lin, & Ross, 2002). When we are asked about the behavior of other people, we tend to quickly make trait attributions (“Oh, Sarah, she’s really shy”). On the other hand, when we think of ourselves, we are more likely to take the situation into account—we tend to say, “Well, I’m shy in my psychology discussion class, but with my baseball friends I’m not at all shy.” When our friend behaves in a helpful way, we naturally believe that she is a friendly person; when we behave in the same way, on the other hand, we realize that there may be a lot of other reasons why we did what we did.

You might be able to get a feel for the actor-observer difference by taking the following short quiz. First, think about a person you know—your mom, your roommate, or someone from one of your classes. Then, for each row, circle which of the three choices best describes his or her personality (for instance, is the person’s personality more energetic, relaxed, or does it depend on the situation?). Then answer the questions again, but this time about yourself.

PERSONALITY QUIZ

Row	Personality Trait		
1.	Energetic	Relaxed	Depends on the situation
2.	Skeptical	Trusting	Depends on the situation
3.	Quiet	Talkative	Depends on the situation
4.	Intense	Calm	Depends on the situation

Richard Nisbett and his colleagues (Nisbett, Caputo, Legant, & Marecek, 1973) had college students complete exactly this task—they did it for themselves, for

their best friend, for their father, and for the newscaster Walter Cronkite. As you can see in Table 4.4 “The [Actor-Observer Difference](#)”, the participants checked one of the two trait terms more often for other people than they did for themselves and checked off “depends on the situation” more frequently for themselves than they did for the other person—this is the actor-observer difference.

TABLE 4.4 THE ACTOR-OBSERVER DIFFERENCE

Person	Trait Term	Depends on the Situation
Self	11.92	8.08
Best Friend	14.21	5.79
Father	13.42	6.58
Walter Cronkite	15.08	4.92

This table shows the average number of times (out of 20) that participants checked off a trait term (such as “energetic” or “talkative”) rather than “depends on the situation” when asked to describe the personalities of themselves and various other people. You can see the actor-observer difference. Participants were significantly more likely to check off “depends on the situation” for themselves than for others. Data are from Nisbett, Caputo, Legant, and Marecek (1973).

Like the fundamental attribution error, the actor-observer difference reflects our tendency to overweight the personal explanations of the behavior of other people. However, a recent [meta-analysis](#) (Malle, 2006) has suggested that the actor-observer difference might not be as strong as the fundamental attribution error is and may only be likely to occur for some people. For example, there is some suggestive evidence the actor-observer difference is less likely for people we know better.

The tendency to overemphasize personal attributions seems to occur for several reasons. One reason is simply because other people are so [salient](#) in our social environments. When I look at you, I see you as my focus, and so I am likely to make personal attributions about you. It’s just easy because I am looking right

at you. When I look at Leslie giving that big tip, I see her—and so I decide that it is she who caused the action. When I think of my own behavior, however, I do not see myself but am instead more focused on my situation. I realize that it is not only me but also the different situations that I am in that determine my behavior. I can remember the other times that I didn't give a big tip, and so I conclude that my behavior is caused more by the situation than by my underlying personality. In fact, research has shown that we tend to make more personal attributions for the people we are directly observing in our environments than for other people who are part of the situation but who we are not directly watching (Taylor & Fiske, 1975).

A second reason for the tendency to make so many personal attributions is that they are simply easier to make than situational attributions. In fact, personal attributions seem to be made spontaneously, without any effort on our part, and even on the basis of only very limited behavior (Newman & Uleman, 1989; Uleman, Blader, & Todorov, 2005). Personal attributions just pop into mind before situational attributions do.

Third, personal attributions also dominate because we need to make them in order to understand a situation. That is, we cannot make either a personal attribution (e.g., “Leslie is generous”) or a situational attribution (“Leslie is trying to impress her friends”) until we have first identified the behavior as being a generous behavior (“Leaving that big tip was a generous thing to do”). So we end up starting with the personal attribution (“generous”) and only later try to correct or adjust our judgment (“Oh,” we think, “perhaps it really was the situation that caused her to do that”).

Adjusting our judgments generally takes more effort than making the original judgment does, and the adjustment is frequently not sufficient. We are more likely to commit the fundamental attribution error—quickly jumping to the conclusion that behavior is caused by underlying personality—when we are tired, distracted, or busy doing other things (Geeraert, Yzerbyt, Corneille, & Wigboldus, 2004; Gilbert, 1989; Trope & Alfieri, 1997).

I hope you might have noticed that there is an important moral about perceiving others that applies here: We should not be too quick to judge other people! It is easy to think that poor people are lazy, that people who harm someone else are mean, and that people who say something harsh are rude or unfriendly. But these attributions may frequently overemphasize the role of the person. This can sometimes result in overly harsh evaluations of people who don't really deserve them—we tend to blame the victim, even for events that they can't really control (Lerner, 1980). Sometimes people are lazy, mean, or rude, but they may also be the victims of situations. When you find yourself making strong personal attribution for the behaviors of others, your experience as a social psychologist should lead you to stop and think more carefully: Would you want other people to make personal attributions for your behavior in the same situation, or would you prefer that they more fully consider the situation surrounding your behavior? Are you perhaps making the fundamental attribution error?

Self-Serving Attributions

You may recall that the process of making causal attributions is supposed to proceed in a careful, rational, and even scientific manner. But this assumption turns out to be, at least in part, untrue. Our attributions are sometimes biased by affect—particularly the fundamental desire to enhance the self. Although we would like to think that we are always rational and accurate in our attributions, we often tend to distort them to make us feel better. [Self-serving attributions](#) are attributions that help us meet our desires to see ourselves positively (Mezulis, Abramson, Hyde, & Hankin, 2004).

I have noticed that I sometimes make self-enhancing attributions. If my students do well on one of my exams, I make a personal attribution for their successes (“I am, after all, a great teacher!”). On the other hand, when my students do poorly on an exam, I tend to make a situational attribution—I blame them for their failure (“Why didn’t you guys study harder?”). You can see that this process is clearly not the type of scientific, rational, and careful process that attribution theory suggests I should be following. It’s unfair, although it

does make me feel better about myself. If I were really acting like a scientist, however, I would determine ahead of time what causes good or poor exam scores and make the appropriate attribution regardless of the outcome.

You might have noticed yourself making [self-serving attributions](#) too. Perhaps you have blamed another driver for an accident that you were in or blamed your partner rather than yourself for a breakup. Or perhaps you have taken credit (internal) for your successes but blamed your failures on external causes. If these judgments were somewhat less than accurate, even though they did benefit you, then they are indeed self-serving.

Research Focus

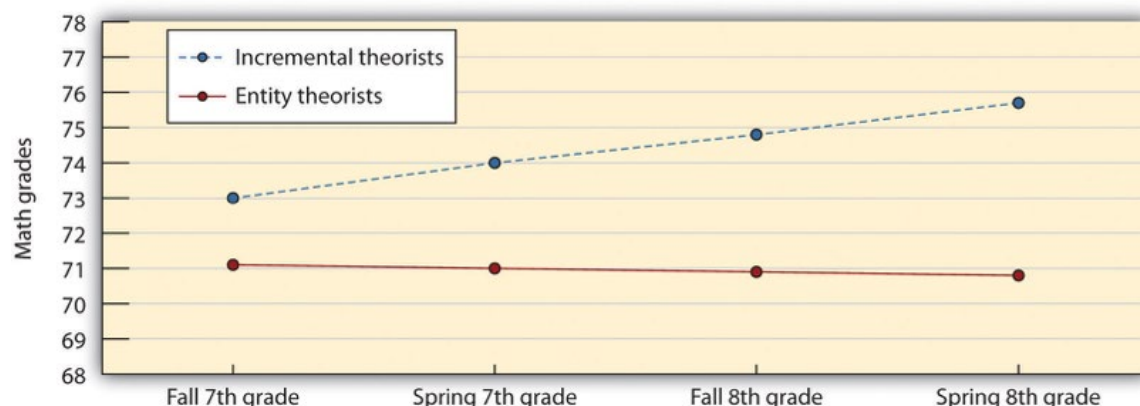
How Our Attributions Can Influence Our School Performance

Carol Dweck and her colleagues (Blackwell, Trzesniewski, & Dweck, 2007) tested whether the type of attributions students make about their own characteristics might influence their school performance. They assessed the attributional tendencies and the math performance of 373 junior high school students at a public school in New York City. When they first entered seventh grade, the students all completed a measure of attributional styles. Those who tended to agree with statements such as “You have a certain amount of intelligence, and you really can’t do much to change it” were classified as fixed or entity theorists, whereas those who agreed more with statements such as “You can always greatly change how intelligent you are” were classified as growth or incremental theorists. Then the researchers measured the students’ math grades at the end of the fall and spring terms in seventh and eighth grades.

As you can see in the following figure, the researchers found that the students who were classified as incremental theorists improved

their math scores significantly more than did the entity students. It seems that the incremental theorists really believed that they could improve their skills and were then actually able to do it. These findings confirm that how we think about traits can have a substantial impact on our own behavior.

Figure 6.6



Students who believed that their intelligence was more malleable (growth or incremental styles) were more likely to improve their math skills than were students who believed that intelligence was difficult to change (entity styles). Data are from Blackwell et al. (2007).

Attributional Styles and Mental Health

As we have seen in this chapter, how we make attributions about other people has a big influence on our reactions to them. But we also make attributions for our own behaviors. Social psychologists have discovered that there are important individual differences in the attributions that people make to the negative events that they experience and that these attributions can have a big influence on how they respond to them. The same negative event can create anxiety and depression in one individual but have virtually no effect on someone else. And still another person may see the negative event as a challenge to try even harder to overcome the difficulty (Blascovich & Mendes, 2000).

A major determinant of how we react to perceived threats is the attributions

that we make to them. [Attributional style](#) refers to the type of attributions that we tend to make for the events that occur to us. These attributions can be to our own characteristics (internal) or to the situation (external), but attributions can also be made on other dimensions, including stable versus unstable, and global versus specific. Stable attributions are those that we think will be relatively permanent, whereas unstable attributions are expected to change over time. Global attributions are those that we feel apply broadly, whereas specific attributions are those causes that we see as more unique to specific events.

You may know some people who tend to make negative or pessimistic attributions to negative events that they experience—we say that these people have a negative [attributional style](#). These people explain negative events by referring to their own internal, stable, and global qualities. People with negative attributional styles say things such as the following:

“I failed because I am no good” (an [internal attribution](#)).

“I always fail” (a stable attribution).

“I fail in everything” (a global attribution).

You might well imagine that the result of these negative attributional styles is a sense of hopelessness and despair (Metalsky, Joiner, Hardin, & Abramson, 1993). Indeed, Alloy, Abramson, and Francis (1999) found that college students who indicated that they had negative attributional styles when they first came to college were more likely than those who had a more positive style to experience an episode of depression within the next few months.

People who have extremely negative attributional styles, in which they continually make external, stable, and global attributions for their behavior, are said to be experiencing [learned helplessness](#) (Abramson, Seligman, & Teasdale, 1978; Seligman, 1975). [Learned helplessness](#) was first demonstrated in research that found that some dogs that were strapped into a harness and exposed to

painful electric shocks became passive and gave up trying to escape from the shock, even in new situations in which the harness had been removed and escape was therefore possible. Similarly, some people who were exposed to bursts of noise later failed to stop the noise when they were actually able to do so. In short, learned helplessness is the tendency to make external, rather than internal, attributions for our behaviors. Those who experience learned helplessness do not feel that they have any control over their own outcomes and are more likely to have a variety of negative health outcomes (Henry, 2005; Peterson & Seligman, 1984).

Another type of attributional technique that people sometimes use to help them feel better about themselves is known as [self-handicapping](#). [Self-handicapping](#) occurs when we make statements or engage in behaviors that help us create a convenient [external attribution](#) for potential failure. For instance, in research by Berglas and Jones (1978), participants first performed an intelligence test on which they did very well. It was then explained to them that the researchers were testing the effects of different drugs on performance and that they would be asked to take a similar but potentially more difficult intelligence test while they were under the influence of one of two different drugs.

The participants were then given a choice—they could take a pill that was supposed to facilitate performance on the intelligence task (making it easier for them to perform) or a pill that was supposed to inhibit performance on the intelligence task, thereby making the task harder to perform (no drugs were actually administered). Berglas found that men—but not women—engaged in self-handicapping: They preferred to take the performance-inhibiting rather than the performance-enhancing drug, choosing the drug that provided a convenient external attribution for potential failure.

Although women may also self-handicap, particularly by indicating that they are unable to perform well due to stress or time constraints (Hirt, Deppe, & Gordon, 1991), men seem to do it more frequently. This is consistent with the general gender differences we have talked about in many places in this book—on average, men are more concerned about maintaining their self-esteem and

social status in the eyes of themselves and others than are women.

You can see that there are some benefits (but also, of course, some costs) of self-handicapping. If we fail after we self-handicap, we simply blame the failure on the external factor. But if we succeed despite the handicap that we have created for ourselves, we can make clear internal attributions for our success. But engaging in behaviors that create self-handicapping can be costly because they make it harder for us to succeed. In fact, research has found that people who report that they self-handicap regularly show lower life satisfaction, less competence, poorer moods, less interest in their jobs, and even more substance abuse (Zuckerman & Tsai, 2005). Although self-handicapping would seem to be useful for insulating our feelings from failure, it is not a good tack to take in the long run.

Fortunately, not all people have such negative attributional styles. In fact, most people tend to have more positive ones—styles that are related to high positive self-esteem and a tendency to explain the negative events they experience by referring to external, unstable, and specific qualities. Thus people with positive attributional styles are likely to say things such as the following:

“I failed because the task is very difficult” (an external attribution).

“I will do better next time” (an unstable attribution).

“I failed in this domain, but I’m good in other things” (a specific attribution).

In sum, we can say that people who make more positive attributions toward the negative events that they experience will persist longer at tasks and that this persistence can help them. But there are limits to the effectiveness of these strategies. We cannot control everything, and trying to do so can be stressful. We can change some things but not others; thus sometimes the important thing is to know when it’s better to give up, stop worrying, and just let things happen.

Having a positive outlook is healthy, but we cannot be unrealistic about what we can and cannot do. [Unrealistic optimism](#) is the tendency to be overly positive about the likelihood that negative things will occur to us and that we will be able to effectively cope with them if they do. When we are too optimistic, we may set ourselves up for failure and depression when things do not work out as we had hoped (Weinstein & Klein, 1996). We may think that we are immune to the potential negative outcomes of driving while intoxicated or practicing unsafe sex, but these optimistic beliefs are not healthy. Fortunately, most people have a reasonable balance between optimism and realism (Taylor & Armor, 1996). They tend to set goals that they believe they can attain, and they regularly make some progress toward reaching them. Research has found that setting reasonable goals and feeling that we are moving toward them makes us happy, even if we may not in fact attain the goals themselves (Lawrence, Carver, & Scheier, 2002).

Key Takeaways

- [Causal attribution](#) is the process of trying to determine the causes of people's behavior.
- Attributions are made to personal or situational causes.
- According to Bernard Weiner, success or failure can be seen as coming from either personal causes (ability and motivation) or situational causes (luck and task difficulty).
- Our attributional skills are “good enough” but not perfect. Examples of errors in causal attribution are the fundamental attribution error, the actor-observer difference, and the bias to make self-serving
- Individual differences in attributional styles can influence how we respond to the negative events that we experience.
- People who have extremely negative attributional styles, in which they continually make external, stable, and global attributions for their behavior, are said to be experiencing learned helplessness
- Self-handicapping is an attributional technique that prevents us from making ability attributions for our own failures.

Having a positive outlook is healthy, but should be tempered. We should not be unrealistic about what we can and cannot do or this will be setting ourselves up for failure and other issues.

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Chapter 5: Attitudes, Behavior, and Persuasion

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5.0 Attitudes, Behavior, and Persuasion

How the Obama Campaign Effectively Used Persuasion to Defeat John McCain

In ads and speeches, President Barack Obama's 2008 presidential campaign used a variety of persuasion techniques, many based on principles of [social psychology](#). The campaign's outcome was that millions of voters joined Obama's team and helped him defeat his opponent, Senator John McCain. Many of the "Obama for America" ads were online, in stark contrast to the more traditional media used by the McCain campaign.

Obama's campaign used a range of techniques, including cognitive and emotional persuasive appeals and attitude inoculation. The campaign focused in part on self-interest, trying to reach voters who were feeling the pinch of high gas prices. In some of the online ads, Senator McCain was pictured next to a list of high gas station prices while a fuel pump moved across the ad. The idea was that Obama would be seen as a clean candidate promoting clean energy while McCain was labeled as accepting contributions from the oil industry.

Obama also tapped into the strong human desire for [other-concern](#). In his speeches he talked about being part of an important group that would make a difference, thereby creating strong [social identity](#) and positive emotions. Examples were his use of slogans such as "Yes We Can," "We



Believe,” and “Join Us.”

Obama also made use of attitude inoculation, a technique in which he warned his supporters that an ad attacking him would be coming, at the same time reminding them of ways to counterargue the ad. Obama argued, for instance, “What they’re going to try to do is make you scared of me. They’ll say ‘He’s not patriotic enough, he’s got a funny name...he’s young and inexperienced.’” Obama hoped that people would be motivated to discount these messages when they came from McCain.

The techniques that were used by the Obama team are not unique—they are used by most contemporary advertisers, and also by attorneys, negotiators, corporate executives, and anyone else who wants to be an effective persuader—but they were masterfully employed by “Obama for America.”

Sources: Whitman, D. E. (2010). *Cashvertising*. Career Press; Kaye, Kate (2008). Obama targets Pennsylvania voters with pure persuasion ads. Personal Democracy Forum. Retrieved from <http://techpresident.com/blog-entry/obama-targets-pennsylvania-voters-pure-persuasion-ads>.

One of the most central concepts in social psychology is that of attitudes (Banaji & Heiphetz, 2010). In this chapter we will focus on attitude formation, attitude change, and the influence of attitudes on behavior. We will see that attitudes are an essential component of our lives because they play a vital role in helping us effectively interact with our environment. Our attitudes allow us to make judgments about events (“I hate waiting in traffic”), people (“I really like Barack Obama”), social groups (“I love the University of Maryland”), and many other things.

We will begin our discussion by looking at how attitudes are defined by the ABCs of social psychology—affect, behavior, and cognition—noting that some attitudes are more affective in nature, some more cognitive in nature, and some

more behavioral in nature. We will see that attitudes vary in terms of their strength such that some attitudes are stronger and some are weaker. And we will see that the strength of our attitudes is one of the determinants of when our attitudes successfully predict our behaviors.

Then we will explore how attitudes can be created and changed—the basic stuff of persuasion, advertising, and marketing. We will look at which types of communicators can deliver the most effective messages to which types of message recipients. And we will see that the same message can be more effective for different people in different social situations. We will see that persuasive messages may be processed either spontaneously (that is, in a rather cursory or superficial way) or thoughtfully (with more cognitive elaboration of the message) and that the amount and persistence of persuasion will vary on the processing route that we use. Most generally, we will see that persuasion is effective when the communication resonates with the message recipient's motivations, desires, and goals (Kruglanski & Stroebe, 2005).

Because the ABCs of social psychology tend to be consistent, persuasive appeals that change our thoughts and feelings will be effective in changing our behavior as well. This attitude consistency means that if I make you think and feel more positively about my product, then you will be more likely to buy it. And if I can make you think and feel more positively about my political candidate, then you will be more likely to vote for him or her.

But attitude consistency works in the other direction too, such that when our behaviors change, our thoughts and beliefs about the attitude object may also change. Once we vote for a candidate or buy a product, we will find even more things to like about them, and our attitudes toward them will become even more positive. Although this possibility is less intuitive and therefore may seem more surprising, it also follows from the basic consistencies among affect, cognition, and behavior. We will discuss two theories—[self-perception](#) theory and [cognitive dissonance](#) theory—each of which makes this prediction but for different reasons.

Creating Effective Communications

An important factor is to determine what type of message we deliver. Neither social psychologists nor advertisers are so naïve as to think that simply presenting a strong message is sufficient. No matter how good the message is, it will not be effective unless people pay attention to it, understand it, accept it, and incorporate it into their self-concept. This is why we attempt to choose good communicators to present our ads in the first place, and why we tailor our communications to get people to process them the way we want them to.

Figure 5.3

Spontaneous attitude change:



Thoughtful attitude change:



Spontaneous attitude change occurs as a direct or affective response to the message, whereas thoughtful attitude change is based on our cognitive elaboration of the message.

The messages that we deliver may be processed either spontaneously (other terms for this include peripherally or heuristically—Chen & Chaiken, 1999; Petty & Wegener, 1999) or thoughtfully (other terms for this include centrally or systematically). Spontaneous processing is direct, quick, and often involves affective responses to the message. Thoughtful processing, on the other hand, is more controlled and involves a more careful cognitive elaboration of the meaning of the message (Figure 5.3). The route that we take when we process a

communication is important in determining whether or not a particular message changes attitudes.

Spontaneous Message Processing

Because we are bombarded with so many persuasive messages—and because we do not have the time, resources, or interest to process every message fully—we frequently process messages spontaneously. In these cases, if we are influenced by the communication at all, it is likely that it is the relatively unimportant characteristics of the advertisement that will influence us, such as the attractiveness of the communicator or the music playing in the ad.

If we find the communicator cute, if the music in the ad puts us in a good mood, or if it appears that other people around us like the ad, then we may simply accept the message without thinking about it very much (Giner-Sorolla & Chaiken, 1997). In these cases, we engage in [spontaneous message processing](#), in which we accept a persuasion attempt because we focus on whatever is most obvious or enjoyable, without much attention to the message itself. Shelley Chaiken (1980) found that students who were not highly involved in a topic, because it did not affect them personally, were more persuaded by a likeable communicator than by an unlikeable one, regardless of whether the communicator presented a good argument for the topic or a poor one. On the other hand, students who were more involved in the decision were more persuaded by the better than by the poorer message, regardless of whether the communicator was likeable or not—they were not fooled by the likeability of the communicator.

You might be able to think of some advertisements that are likely to be successful because they create spontaneous processing of the message by basing their persuasive attempts around creating emotional responses in the listeners. In these cases the advertisers use association [learning](#) to associate the positive features of the ad with the product. Television commercials are often humorous, and automobile ads frequently feature beautiful people having fun driving beautiful cars. The slogans “The joy of cola!” “Coke adds life!” and “Be a

Pepper!” are good ads in part because they successfully create positive affect in the listener.

In some cases emotional ads may be effective because they lead us to watch or listen to the ad rather than simply change the channel or doing something else. The clever and funny TV ads that are shown during the Super Bowl broadcast every year are likely to be effective because we watch them, remember them, and talk about them with others. In this case the positive affect makes the ads more salient, causing them to grab our attention. But emotional ads also take advantage of the role of affect in information processing. We tend to like things more when we are in good moods, and—because positive affect indicates that things are OK—we process information less carefully when we are in good moods. Thus the spontaneous approach to persuasion is particularly effective when people are happy (Sinclair, Mark, & Clore, 1994), and advertisers try to take advantage of this fact.

Association Learning

Association learning *occurs when an object or event comes to be associated with a natural response, such as an automatic behavior or a positive or negative emotion*. If you’ve ever become hungry when you drive by one of your favorite pizza stores, it is probably because the sight of the pizzeria has become associated with your experiences of enjoying the pizzas. We may enjoy smoking cigarettes, drinking coffee, and eating not only because they give us pleasure themselves but also because they have been associated with pleasant social experiences in the past.

Association learning also influences our knowledge and judgments about other people. For instance, research has shown that people view men and women who are seen alongside other people who are attractive, or who are said to have attractive girlfriends or boyfriends, more favorably than they do the same people who are seen alongside more average-looking others (Sigall & Landy, 1973). This liking is due to association learning—we have positive feelings toward the people simply because those people are associated with the positive

features of the attractive others.

Association learning (classical conditioning) has long been, and continues to be, an effective tool in marketing and advertising (Hawkins, Best, & Coney, 1998). The general idea is to *create an advertisement that has positive features so that it creates enjoyment in the person exposed to it*. Because the *product* being advertised is mentioned in the ad, it becomes *associated with the positive feelings* that the ad creates. In the end, if everything has gone well, seeing the product online or in a store will then create a positive response in the buyer, leading him or her to be more likely to purchase the product.

For instance, if people enjoy watching a college basketball team playing basketball, and if that team is sponsored by a product, such as Pepsi, then people may end up experiencing positive feelings when they view a can of Pepsi. Of course, the sponsor wants to sponsor only good teams and good athletes because these create more pleasurable responses.

Advertisers use a variety of techniques to create positive advertisements, including enjoyable music, cute babies, attractive models, and funny spokespeople. In one study, Gorn (1982) showed research participants pictures of writing pens of different colors, but paired one of the pens with pleasant music and another with unpleasant music. When given a choice as a free gift, more people chose the pen that had been associated with the pleasant music. In another study, Schemer, Matthes, Wirth, and Textor (2008) found that people were more interested in products that had been embedded in music videos of artists that they liked and less likely to be interested when the products were in videos featuring artists that they did not like.

Another type of ad that is based on principles of classical conditioning is one that associates fear with the use of a product or behavior, such as those that show pictures of deadly automobile accidents to encourage seatbelt use or images of lung cancer surgery to discourage smoking. These ads have also been found to be effective (Das, de Wit, & Stroebe, 2003; Perloff, 2003; Witte & Allen, 2000), largely because of conditioning.

Recently, the U.S. government created new negative and graphic images to place on cigarette packs in order to increase an association between negative responses and cigarettes. The idea is that when we see a cigarette and the fear of dying is associated with it, we will be less likely to light up.

Taken together then, research studies provide ample evidence of the utility of associational learning in advertising, in ads using positive stimuli and in those using negative stimuli. This does not mean, however, that we are always influenced by these ads. The likelihood that association learning will be successful is greater when we do not know much about the products, where the differences between products are relatively minor, and when we do not think too carefully about the choices (Schemer et al., 2008).

Association learning is also implicated in the development of unfair and unjustified racial prejudices. We may dislike people from certain racial or ethnic groups because we frequently see them portrayed in the media as associated with [violence](#), drug use, or terrorism. And we may avoid people with certain physical characteristics simply because they remind us of other people we do not like.

Lewicki (1985) conducted research that demonstrated the influence of association learning and how quickly and easily such learning can happen. In his experiment, high school students first had a brief interaction with a female experimenter who had short hair and wore glasses. The study was set up so that the students had to ask the experimenter a question, and (according to random assignment) the experimenter responded in either a negative way or a neutral way toward the participants. Then the students were told to go into a second room in which two experimenters were present and to approach either one of them. The researchers arranged it so that one of the two experimenters looked a lot like the original experimenter and the other one did not (she had longer hair and did not wear glasses). The students were significantly more likely to avoid the experimenter who looked like the original experimenter when that experimenter had been negative to them than when she had treated them neutrally. As a result of associational learning, the negative behavior of the first

experimenter unfairly “rubbed off” onto the second.

Donal Carlston and his colleagues (Mae & Carlston, 2005; Skowronski, Carlston, Mae, & Crawford, 1998) discovered still another way that association learning can occur: When we say good or bad things about another person in public, the people who hear us say these things associate those characteristics with us, such that they like people who say positive things and dislike people who say negative things. The moral is clear—association learning is powerful, so be careful what you do and say

Fear Appeals

Another type of ad that is based on emotional responses is the one that uses fear appeals, such as ads that show pictures of deadly automobile accidents to encourage seatbelt use or images of lung cancer surgery to decrease smoking. By and large, fearful messages are persuasive (Das, de Wit, & Stroebe, 2003; Perloff, 2003; Witte & Allen, 2000). Again, this is due in part to the fact that the emotional aspects of the ads make them salient and lead us to attend to and remember them. And fearful ads may also be framed in a way that leads us to focus on the salient negative outcomes that have occurred for one particular individual. When we see an image of a person who is jailed for drug use, we may be able to empathize with that person and imagine how we would feel if it happened to us. Thus this ad may be more effective than more “statistical” ads stating the [base rates](#) of the number of people who are jailed for drug use every year.

Fearful ads also focus on [self-concern](#), and advertisements that are framed in a way that suggests that a behavior will harm the self are more effective than the same messages that are framed more positively. Banks, Salovey, Greener, and Rothman (1995) found that a message that emphasized the negative aspects of not getting a breast cancer screening mammogram (“not getting a mammogram can cost you your life”) was more effective than a similar message that emphasized the positive aspects (“getting a mammogram can save your life”) in getting women to have a mammogram over the next year. These findings are

consistent with the general idea that the brain responds more strongly to negative affect than it does to positive affect (Ito, Larsen, Smith, & Cacioppo, 1998).

Although laboratory studies generally find that fearful messages are effective in persuasion, they have some problems that may make them less useful in real-world advertising campaigns (Hastings, Stead, & webb, 2004). Fearful messages may create a lot of anxiety and therefore turn people off to the message (Shehryar & Hunt, 2005). For instance, people who know that smoking cigarettes is dangerous but who cannot seem to quit may experience particular anxiety about their smoking behaviors. Fear messages are more effective when people feel that they know how to rectify the problem, have the ability to actually do so, and take responsibility for the change. Without some feelings of self-efficacy, people do not know how to respond to the fear (Aspinwall, Kemeny, Taylor, & Schneider, 1991). Thus if you want to scare people into changing their behavior, it may be helpful if you also give them some ideas about how to do so, so that they feel like they have the ability to take action to make the changes (Passyn & Sujana, 2006).



Anti-smoking ads. Source:

<http://www.fda.gov/>

Thoughtful Message Processing

When we process messages only spontaneously, our feelings are more likely to be important, but when we process messages thoughtfully, cognition prevails. When we care about the topic, find it relevant, and have plenty of time to spend thinking about the communication, we are likely to process the message more deliberately, carefully, and thoughtfully (Petty & Briñol, 2008). In this case

we elaborate on the communication by considering the pros and cons of the message and questioning the validity of the communicator and the message.

Thoughtful message processing occurs when we think about how the message relates to our own beliefs and goals and involves our careful consideration of whether the persuasion attempt is valid or invalid.

When an advertiser presents a message that he or she hopes will be processed thoughtfully, the goal is to create positive cognitions about the attitude object in the listener. The communicator mentions positive features and characteristics of the product and at the same time attempts to downplay the negative characteristics. When people are asked to list their thoughts about a product while they are listening to, or right after they hear, a message, those who list more positive thoughts also express more positive attitudes toward the product than do those who list more negative thoughts (Petty & Briñol, 2008). Because the thoughtful processing of the message bolsters the attitude, thoughtful processing helps us develop strong attitudes, which are therefore resistant to counterpersuasion (Petty, Cacioppo, & Goldman, 1981).

Which Route Do We Take: Thoughtful or Spontaneous?

Both thoughtful and spontaneous messages can be effective, but it is important to know which is likely to be better in which situation and for which people.

When we can motivate people to process our message carefully and thoughtfully, then we are going to be able to present our strong and persuasive arguments with the expectation that our audience will attend to them. If we can get the listener to process these strong arguments thoughtfully, then the attitude change will likely be strong and long lasting. On the other hand, when we expect our listeners to process only spontaneously—for instance, if they don't care too much about our message or if they are busy doing other things—then we do not need to worry so much about the content of the message itself; even a weak (but interesting) message can be effective in this case. Successful advertisers tailor their messages to fit the expected characteristics of their

audiences.

In addition to being motivated to process the message, we must also have the ability to do so. If the message is too complex to understand, we may rely on spontaneous cues, such as the perceived trustworthiness or expertise of the communicator and ignore the content of the message (Hafer, Reynolds, & Obertynski, 1996). When experts are used to attempt to persuade people—for instance, in complex jury trials—the messages that these experts give may be very difficult to understand. In these cases the jury members may rely on the perceived expertise of the communicator rather than his or her message, being persuaded in a relatively spontaneous way. In other cases we may not be able to process the information thoughtfully because we are distracted or tired—in these cases even weak messages can be effective, again because we process them spontaneously (Petty, Wells & Brock, 1976).

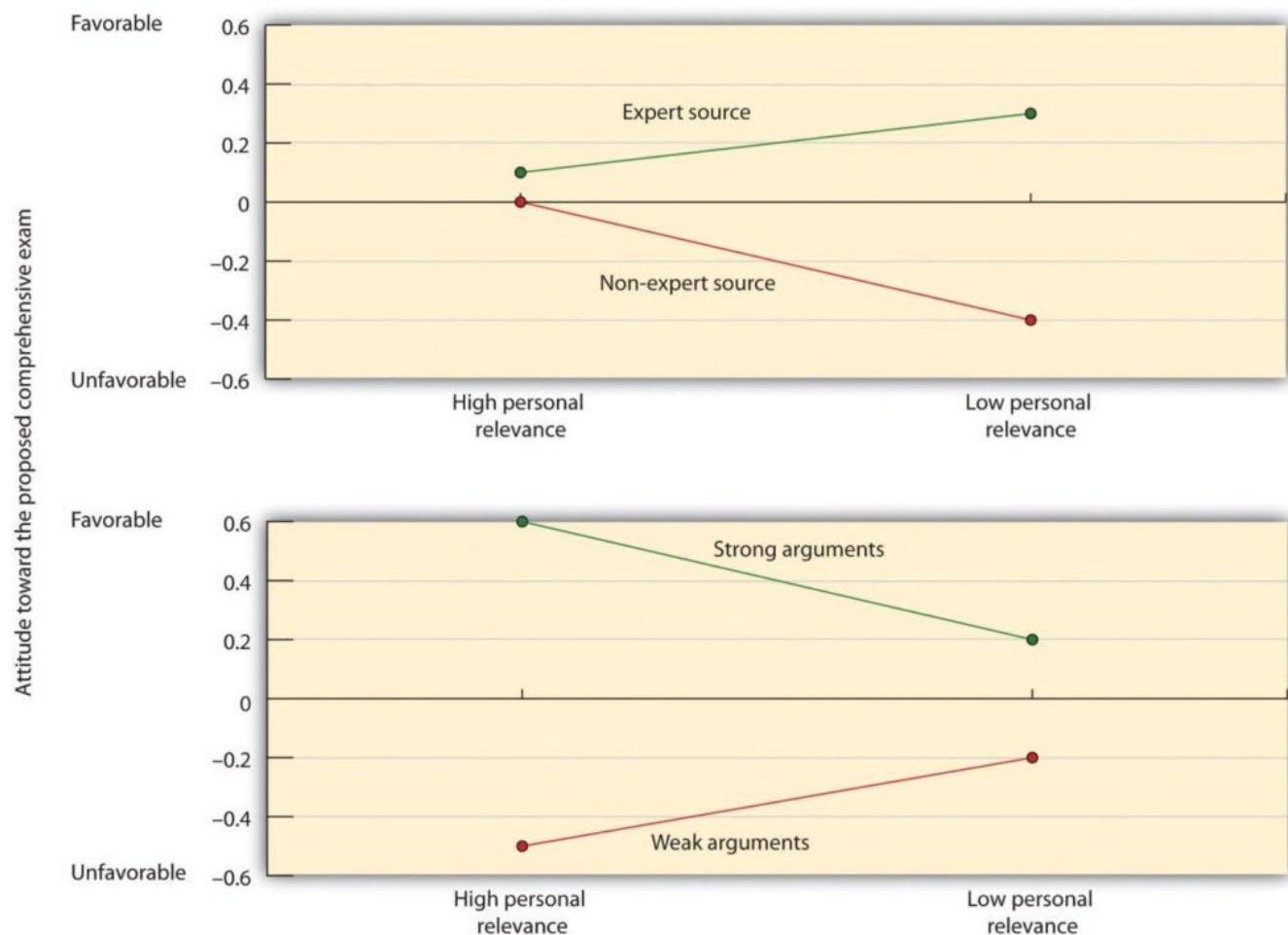
Petty, Cacioppo, and Goldman (1981) showed how different motivations may lead to either spontaneous or thoughtful processing. In their research, college students heard a message suggesting that the administration at their college was proposing to institute a new comprehensive exam that all students would need to pass in order to graduate and then rated the degree to which they were favorable toward the idea. The researchers manipulated three independent variables:

- **Message strength.** The message contained either strong arguments (persuasive data and statistics about the positive effects of the exams at other universities) or weak arguments (relying only on individual quotations and personal opinions).
- **Source expertise.** The message was supposedly prepared either by an expert source (the Carnegie Commission on Higher Education, which was chaired by a professor of education at Princeton University) or by a nonexpert source (a class at a local high school).
- **Personal relevance.** The students were told either that the new exam would begin before they graduated (high personal relevance) or that it would not begin until after they had already graduated (low personal

relevance).

As you can see in Figure 5.4, Petty and his colleagues found two interaction effects. The top panel of the figure shows that the students in the high personal relevance condition (left side) were not particularly influenced by the expertise of the source, whereas the students in the low personal relevance condition (right side) were. On the other hand, as you can see in the bottom panel, the students who were in the high personal relevance condition (left side) were strongly influenced by the quality of the argument, but the low personal involvement students (right side) were not.

Figure 5.4



Petty, Cacioppo, and Goldman (1981) found that students for whom an argument was not personally relevant based their judgments on the expertise of the source (spontaneous processing). Students for whom the decision was more relevant were more influenced by the quality of the message (thoughtful processing).

These findings fit with the idea that when the issue was important, the students engaged in thoughtful processing of the message itself. When the message was largely irrelevant, they simply used the expertise of the source without bothering to think about the message.

Petty, Cacioppo, and Goldman (1981) found that students for whom an argument was not personally relevant based their judgments on the expertise of the source (spontaneous processing), whereas students for whom the decision was more relevant were more influenced by the quality of the message (thoughtful processing).

Because both thoughtful and spontaneous approaches can be successful, advertising campaigns, such as those used by the Obama presidential campaign, carefully make use of both spontaneous and thoughtful messages. In some cases, the messages showed Obama smiling, shaking hands with people around him, and kissing babies; in other ads Obama was shown presenting his plans for energy efficiency and climate change in more detail.

Key Takeaways

- Advertising is effective in changing attitudes, and principles of social psychology can help us understand when and how advertising works.
- The messages that we deliver may be processed either spontaneously or thoughtfully. When we are processing messages only spontaneously, our feelings are more likely to be important, but when we process the message thoughtfully, cognition prevails.
- Both thoughtful and spontaneous messages can be effective, in different situations and for different people.

Adapted from “Chapter 2.1: Sources of Social Knowledge”, “Chapter 5: Attitudes, Behavior, and Persuasion”, “Chapter 5.2: Changing Attitudes Through Persuasion” and “Chapter: 6.3 Individual and Cultural Differences in Person Perception” of [Principles of Social Psychology](#), 2015, used according to

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5.1 Changing Attitudes by Changing Behavior

Learning Objectives

1. Outline the principles of self-perception and explain how they can account for the influences of behavior on attitude.
2. Outline the principles of cognitive dissonance and explain how they can account for the influences of behavior on attitude.

Although it might not have surprised you to hear that we can often predict people's behaviors if we know their thoughts and their feelings about the attitude object, you might be more surprised to find that our actions also have an influence on our thoughts and feelings. It makes sense that if I like Cheerios, I'll buy them, because my thoughts and feelings about a product influence my behavior. But will my attitudes toward Frosted Flakes become more positive if I decide—for whatever reason—to buy them instead of Cheerios?

It turns out that if we engage in a behavior, and particularly one that we had not expected that we would have, our thoughts and feelings toward that behavior are likely to change. This might not seem intuitive, but it represents another example of how the principles of [social psychology](#)—in this case the principle of attitude consistency—lead us to make predictions that wouldn't otherwise be that obvious.

☐ Imagine that one Tuesday evening in the middle of the semester you see your friend Joachim. He's just finished his dinner and tells you that he's planning to head home to study and work on a term paper. When you see him the next day,

however, he seems a bit shaken. It turns out that instead of going home to study, Joachim spent the entire evening listening to music at a rock club in town. He says that he had a great time, stayed up late to watch the last set, and didn't get home until the crack of dawn. And he woke up so late this morning that he missed his first two classes.

You might imagine that Joachim might be feeling some uncertainty and perhaps some regret about his unexpected behavior the night before. Although he knows that it is important to study and to get to his classes on time, he nevertheless realizes that, at least in this case, he neglected his schoolwork in favor of another activity. Joachim seems to be wondering why he, who knows how important school is, engaged in this behavior after he promised himself that he was going home to study. Let's see if we can use the principles of attitude consistency to help us understand how Joachim might respond to his unexpected behavior and how his attitudes toward listening to music and studying might follow from it.

Self-Perception Involves Inferring Our Beliefs From Our Behaviors

People have an avid interest in understanding the causes of behavior, both theirs and others, and doing so helps us meet the important goals of [other-concern](#) and [self-concern](#). If we can better understand how and why the other people around us act the way they do, then we will have a better chance of avoiding harm from others and a better chance of getting those other people to cooperate with and like us. And if we have a better idea of understanding the causes of our own behavior, we can better work to keep that behavior in line with our preferred plans and goals.

In some cases people may be somewhat unsure about their attitudes toward different attitude objects. For instance, perhaps Joachim is a bit unsure about his attitude toward schoolwork versus listening to music (and this uncertainty certainly seems to be increasing in light of his recent behavior). Might Joachim

look at his own behavior to help him determine his thoughts and feelings, just as he might look at the behavior of others to understand why they act the way that they do? [Self-perception](#) occurs *when we use our own behavior as a guide to help us determine our own thoughts and feelings* (Bem, 1972; Olson & Stone, 2005).

Research Focus: Looking at Our Own Behavior to Determine Our Attitudes

Eliot Aronson and J. Merrill Carlsmith (1963) conducted an experiment to determine whether young children might look at their own behavior to help determine their attitudes toward toys. In their research, they first had the children rate the attractiveness of several toys. They then chose a toy that a child had just indicated he or she really wanted to play with and—this was rather mean—told that child he or she could not play with that toy. Furthermore, and according to [random assignment to conditions](#), half of the children were threatened with mild punishment if they disobeyed and the other half were threatened with severe punishment. In the mild threat condition the experimenter said, “I don’t want you to play with the toy. If you played with it, I would be annoyed,” whereas in the harsh threat condition the experimenter said, “I don’t want you to play with the toy. If you played with it, I would be very angry. I would have to take all of my toys and go home and never come back again.” The experimenter then left the room for a few minutes to give the children the time and opportunity to play with the other toys and to resist the temptation of playing with the forbidden toy, while watching the children through a one-way mirror.

It turned out that both the harsh and the mild threat were sufficient to prevent the children from playing with the forbidden toy—none of the children actually did so. Nevertheless, when the experimenter returned to the room and asked each child to again rate how much he

or she liked the forbidden toy, the children who had received the harsh threat rated the toy significantly more positively than the children who had received the mild threat. Furthermore, the children who had only received the mild threat actually rated the forbidden toy less positively than they had at the beginning of the experiment. And this change was long lasting. Even when tested several weeks later, children still showed these changes (Freedman, 1965).

The results of this study indicate that the children's self-perceptions of their behaviors influenced their attitudes toward the toys. Assume for a moment that the children were a bit unsure about how much they liked the toy that they did not play with and that they needed some information to determine their beliefs. The children in the harsh threat condition had a strong external reason for not having played with the toy—they were going to get into really big trouble if they did. Because these children likely saw the [social situation](#) as the cause of their behavior, they found it easy to believe that they still liked the toy a lot. For the children in the mild threat condition, however, the external reasons for their behavior were not so apparent—they had only been asked not to play with the toy. These children were more likely to come to the conclusion that their behavior was caused by internal, person factors—that they did not play with the toy simply because they did not like it that much.

We can use the principles of [self-perception](#) to help understand how Joachim is interpreting his behavior of staying out all night at the club rather than studying. When Joachim looks at this behavior, he may start to wonder why he engaged in it. One answer is that the social situation caused the behavior—he might decide that the band he heard last night was so fantastic that he simply had to go hear them and could not possibly have left the club early. Blaming the situation for the behavior allows him to avoid blaming himself for it and to avoid facing the fact that he found listening to music more important than his schoolwork. But the fact that Joachim is a bit worried about his unusual

behavior suggests that he, at least in part, might be starting to wonder about his own motivations.

Perhaps you have experienced the effects of self-perception. Have you ever found yourself becoming more convinced about an argument you were making as you heard yourself making it? Or did you ever realize how thirsty you must have been as you quickly drank a big glass of water? Research has shown that self-perception occurs regularly and in many different domains. For instance, Gary Wells and Richard Petty (1980) found that people who were asked to shake their heads up and down rather than sideways while reading arguments favoring or opposing tuition increases at their school ended up agreeing with the arguments more, and Daryl Bem (1965) found that when people were told by the experimenter to say that certain cartoons were funny, they ended up actually finding those cartoons funnier. It appears in these cases that people looked at their own behavior: If they moved their head up and down or said that the cartoons were funny, they figured that they must agree with the arguments and like the cartoon.

Creating Insufficient and Oversufficient Justification

You may recall that one common finding in social psychology is that people frequently do not realize the extent to which behavior is influenced by the social situation. Although this is particularly true for the behavior of others, in some cases it may apply to understanding our own behavior as well. This means that, at least in some cases, we may believe that we have chosen to engage in a behavior for personal reasons, even though external, situational factors have actually led us to it. Consider again the children who did not play with the forbidden toy in the Aronson and Carlsmith study, even though they were given only a mild reason for not doing so. Although these children were actually led to avoid the toy by the power of the situation (they certainly would have played with it if the experimenter hadn't told them not to), they frequently concluded that the decision was a personal choice and ended up believing that the toy was

not that fun after all. *When the social situation actually causes our behavior, but we do not realize that the social situation was the cause*, we call the phenomenon [insufficient justification](#). [Insufficient justification](#) occurs when the threat or reward is actually sufficient to get the person to engage in or to avoid a behavior, but the threat or reward is insufficient to allow the person to conclude that the situation caused the behavior.

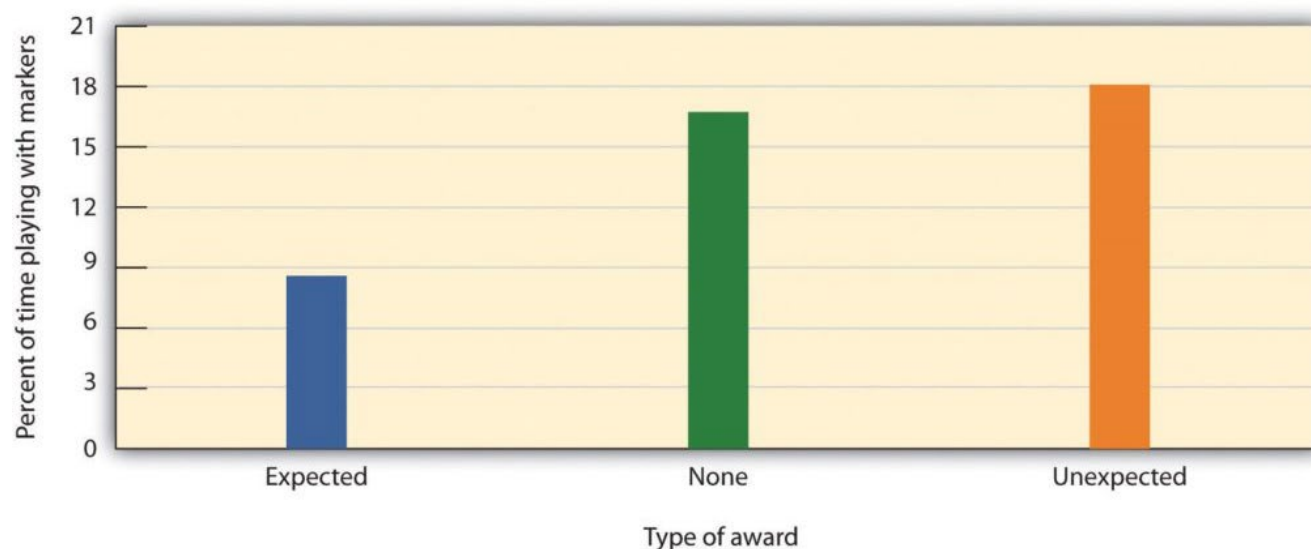
Although insufficient justification leads people to like something less because they (incorrectly) infer that they *did not* engage in a behavior due to *internal* reasons, it is also possible that the opposite may occur. People may in some cases come to like a task less when they perceive that they *did* engage in it for *external* reasons. [Overjustification](#) *occurs when we view our behavior as caused by the situation, leading us to discount the extent to which our behavior was actually caused by our own interest in it* (Deci, Koestner, & Ryan, 1999; Lepper & Greene, 1978).

Mark Lepper and his colleagues (Lepper, Greene, & Nisbett, 1973) studied the [overjustification](#) phenomenon by leading some children to think that they engaged in an activity for a reward rather than because they simply enjoyed it. First, they placed some fun felt-tipped markers into the classroom of the children they were studying. The children loved the markers and played with them right away. Then, the markers were taken out of the classroom and the children were given a chance to play with the markers individually at an experimental session with the researcher. At the research session, the children were randomly assigned to one of three experimental groups. One group of children (the *expected reward condition*) was told that if they played with the markers they would receive a good drawing award. A second group (the *unexpected reward condition*) also played with the markers and got the award—but they were not told ahead of time that they would be receiving the award (it came as a surprise after the session). The third group (the *no reward condition*) played with the markers too but got no award.

Then, the researchers placed the markers back in the classroom and observed how much the children in each of the three groups played with them. The

results are shown in Figure 5.5 “Undermining Initial Interest in an Activity”. The fascinating result was that the children who had been led to expect a reward for playing with the markers during the experimental session played with the markers *less* at the second session than they had at the first session. Expecting to receive the award at the session had undermined their initial interest in the markers.

Figure 5.5 – Undermining Initial Intrinsic Interest or Motivation in an Activity



Children who had been expecting to receive a reward when they played with the fun markers played less with them in their free play period than did children who received no reward or an unexpected reward—their initial interest had been undermined by the expected reward. Data are from Lepper, Greene, and Nisbett (1973).

Although this might not seem logical at first, it is exactly what is expected on the basis of the principle of overjustification. When the children had to choose whether or not to play with the markers when the markers reappeared in the classroom, they based their decision on their own prior behavior. The children in the no reward condition group and the children in the unexpected reward condition group realized that they played with the markers because they liked them. Children in the expected award condition group, however, remembered that they were promised a reward for the activity before they played with the markers the last time. These children were more likely to draw the inference that they play with the markers mostly for the external reward, and because they did not expect to get any reward for playing with the markers in the classroom they discounted the possibility that they enjoyed playing the markers

because they liked them. As a result, they played less frequently with the markers in comparison to the children in the other groups.

This research suggests that, although giving rewards may in many cases lead us to perform an activity more frequently or with more effort, reward may not always increase our *liking* for the activity. In some cases reward may actually make us like an activity less than we did before we were rewarded for it. And this outcome is particularly likely when the reward is perceived as an obvious attempt on the part of others to get us to do something. When children are given money by their parents to get good grades in school, they may improve their school performance to gain the reward. But at the same time their liking for school may decrease. On the other hand, rewards that are seen as more internal to the activity, such as rewards that praise us, remind us of our achievements in the domain, and make us feel good about ourselves as a result of our accomplishments, are more likely to be effective in increasing not only the performance of, but also the liking of, the activity (Deci & Ryan, 2002; Hulleman, Durik, Schweigert, & Harackiewicz, 2008).

In short, when we use harsh punishments we may prevent a behavior from occurring. However, because the person sees that it is the punishment that is controlling the behavior, the person's attitudes may not change. Parents who wish to encourage their children to share their toys or to practice the piano therefore would be wise to provide "just enough" external incentive. Perhaps a consistent reminder of the appropriateness of the activity would be enough to engage the activity, making a stronger reprimand or other punishment unnecessary. Similarly, when we use extremely positive rewards, we may increase the behavior but at the same time undermine the person's interest in the activity.

The problem, of course, is finding the right balance between reinforcement and overreinforcement. If we want our child to avoid playing in the street, and if we provide harsh punishment for disobeying, we may prevent the behavior but not change the attitude. The child may not play in the street while we are watching but do so when we leave. Providing less punishment is more likely to lead the

child to actually change his or her beliefs about the appropriateness of the behavior, but the punishment must be enough to prevent the undesired behavior in the first place. The moral is clear: If we want someone to develop a strong attitude, we should use the smallest reward or punishment that is effective in producing the desired behavior.

The Experience of Cognitive Dissonance Can Create Attitude Change

Let's return once more to our friend Joachim and imagine that we now discover that over the next two weeks he has spent virtually every night at clubs listening to music rather than studying. And these behaviors are starting to have some severe consequences: He just found out that he's failed his biology midterm. How will he ever explain *that* to his parents? What were at first relatively small discrepancies between self-concept and behavior are starting to snowball, and they are starting to have more affective consequences. Joachim is realizing that he's in big trouble—the inconsistencies between his prior attitudes about the importance of schoolwork and his behavior are creating some significant threats to his positive self-esteem. *The discomfort that occurs when we behave in ways that we see as inappropriate, such as when we fail to live up to our own expectations*, is called [cognitive dissonance](#) (Cooper, 2007; Festinger, 1957; Harmon-Jones & Mills, 1999). The discomfort of cognitive dissonance is experienced as pain, showing up in a part of the brain that is particularly sensitive to pain—the anterior cingulate cortex (van Veen, Krug, Schooler, & Carter, 2009).

Leon Festinger and J. Merrill Carlsmith (1959) conducted an important study designed to demonstrate the extent to which behaviors that are discrepant from our initial beliefs can create cognitive dissonance and can influence attitudes. College students participated in an experiment in which they were asked to work on a task that was incredibly boring and lasted for a full hour. After they had finished the task, the experimenter explained that the assistant who normally helped convince people to participate in the study was unavailable

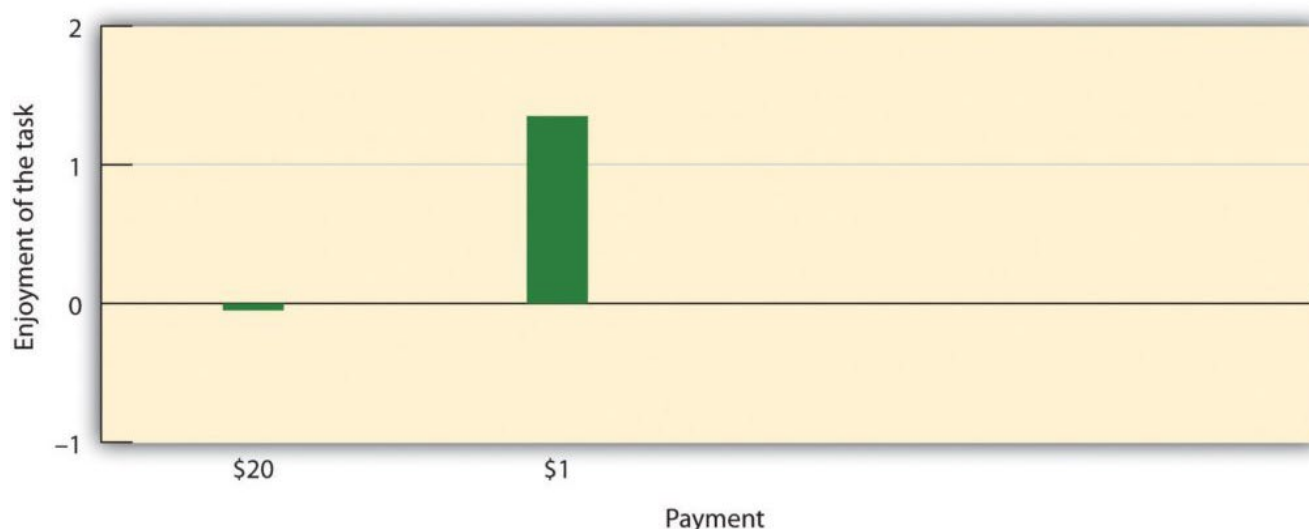
and that he could use some help persuading the next person that the task was going to be interesting and enjoyable. The experimenter explained that it would be much more convincing if a fellow student rather than the experimenter delivered this message and asked the participant if he would be willing to do it. Thus with his request the experimenter induced the participants to lie about the task to another student, and all the participants agreed to do so.

The experimental manipulation involved the amount of money the students were paid to tell the lie. Half of the students were offered a large payment (\$20) for telling the lie, whereas the other half were offered only a small payment (\$1) for telling the lie. After the participants had told the lie, an interviewer asked each of them how much they had enjoyed the task they had performed earlier in the experiment. As you can see in Figure 5.6 “Festinger and Carlsmith”, Festinger and Carlsmith found that the students who had been paid \$20 for saying the tasks had been enjoyable rated the task as very boring, which indeed it was. In contrast, the students who were paid only \$1 for telling the lie changed their attitude toward the task and rated it as significantly more interesting.

Festinger explained the results of this study in terms of consistency and **inconsistency** among cognitions. He hypothesized that some thoughts might be **dissonant**, in the sense that they made us feel uncomfortable, while other thoughts were more *consonant*, in the sense that they made us feel good. He argued that people may feel an uncomfortable state (which he called *cognitive dissonance*) when they have many dissonant thoughts—for instance, between the idea that (a) they are smart and decent people and (b) they nevertheless told a lie to another student for only a small payment.

Festinger argued that the people in his experiment who had been induced to lie for only \$1 experienced more cognitive dissonance than the people who were paid \$20 because the latter people had a strong external justification for having done it whereas the former did not. The people in the \$1 condition, Festinger argued, needed to convince themselves that the task was actually interesting to reduce the dissonance they were experiencing.

Figure 5.6 – Festinger and Carlsmith



Participants who had engaged in a boring task and then told another student it was interesting experienced cognitive dissonance, leading them to rate the task more positively in comparison to those who were paid \$20 to do the same. Data are from Festinger and Carlsmith (1959).

Although originally considered in terms of the inconsistency among different cognitions, Festinger's theory has also been applied to the negative feelings that we experience when there is inconsistency between our attitudes and our behavior, and particularly when the behavior threatens our perceptions of ourselves as good people (Aronson, 1969). Thus Joachim is likely feeling cognitive dissonance because he has acted against his better judgment and these behaviors are having some real consequences for him. The dissonant thoughts involve (a) his perception of himself as a hardworking student, compared to (b) his recent behaviors that do not support that idea. Our expectation is that Joachim will not enjoy these negative feelings and will attempt to get rid of them.

We Reduce Dissonance by Decreasing Dissonant or by Increasing Consonant Cognitions

Because Joachim's perception of himself as a hardworking student is now in

jeopardy, he is feeling cognitive dissonance and will naturally try to reduce these negative emotions. He can do so in a number of ways. One possibility is that Joachim could simply change his behavior by starting to study more and go out less. If he is successful in doing this, his dissonance will clearly be reduced and he can again feel good about himself. But it seems that he has not been very successful in this regard—over the past weeks he has continually put off studying for listening to music. A second option is to attempt to reduce his dissonant cognitions—those that threaten his self-esteem. Perhaps he might try to convince himself that he has only failed one test and that he didn't expect to do very well in biology anyway. If he can make the negative behaviors seem less important, dissonance will be reduced.

One of Festinger's most powerful insights into social psychology was that, even if Joachim cannot change his behavior and even if he knows that what he's doing has negative consequences, he still has a third option: He can create new consonant cognitions to counteract the dissonant cognitions. For instance, Joachim might try to convince himself that he is going to become an important record producer some day and that it is therefore essential that he attend many concerts. When Joachim takes this route he changes his beliefs to be more in line with his behavior, and the outcome is that he has now restored attitude consistency. His behaviors no longer seem as discrepant from his attitudes as they were before, and when consistency is restored, dissonance is reduced. What the principles of cognitive dissonance suggest, then, is that we may frequently spend more energy convincing ourselves that we are good people than we do thinking of ourselves accurately. Of course we do this because viewing ourselves negatively is painful.

Cognitive Dissonance in Everyday Life

Cognitive dissonance is an important social psychological principle that can explain how attitudes follow behavior in many domains of our everyday life. For instance, people who try but fail to quit smoking cigarettes naturally suffer lowered self-esteem (Gibbons, Eggleston, & Benthin, 1997). But rather than accepting this negative feeling, they frequently attempt to engage in behaviors

that reduce dissonance. They may try to convince themselves that smoking is not that bad: “My grandmother smoked but lived to be 93 years old!” “I’m going to quit next year!” Or they may try to add new consonant cognitions: “Smoking is fun; it relaxes me.” You can see that these processes, although making us feel better about ourselves at least in the short run, may nevertheless have some long-term negative outcomes.

Elliot Aronson and Judson Mills (1959) studied whether the cognitive dissonance created by an initiation process could explain how much [commitment](#) students felt to a group they were part of. In their experiment, female college students volunteered to join a group that would be meeting regularly to discuss various aspects of the psychology of sex. According to random assignment, some of the women were told that they would be required to perform an embarrassing procedure (they were asked to read some obscene words and some sexually oriented passages from a novel in public) before they could join the group, whereas other women did not have to go through this initiation. Then all the women got a chance to listen to the group’s conversation, which turned out to be very boring.

Aronson and Mills found that the women who had gone through the embarrassing experience subsequently reported more liking for the group than those who had not, and Gerard and Matthewson (1966) found that having to take some electrical shocks as part of an initiation process had the same effect. Aronson and Mills argued that the more effort an individual expends to become a member of the group (for instance, a severe initiation), the more he will become committed to the group in order to justify the effort he has put in during the initiation. The idea is that the effort creates dissonant cognitions (“I did all this work to join the group”), which are then justified by creating more consonant ones (“OK, this group is really pretty fun”). The women who spent little effort to get into the group were able to see the group as the dull and boring conversation that it was. The women who went through the more severe initiation, however, succeeded in convincing themselves that the same discussion was a worthwhile experience. When we put in effort for something—an initiation, a big purchase price, or even some of our precious time—we will

likely end up liking the activity more than we would have if the effort had been less. Even the effort of having to fill out a purchase agreement for a product, rather than having the salesperson do it for you, creates commitment to the purchase and a greater likelihood of staying in the deal (Cialdini, 1988).

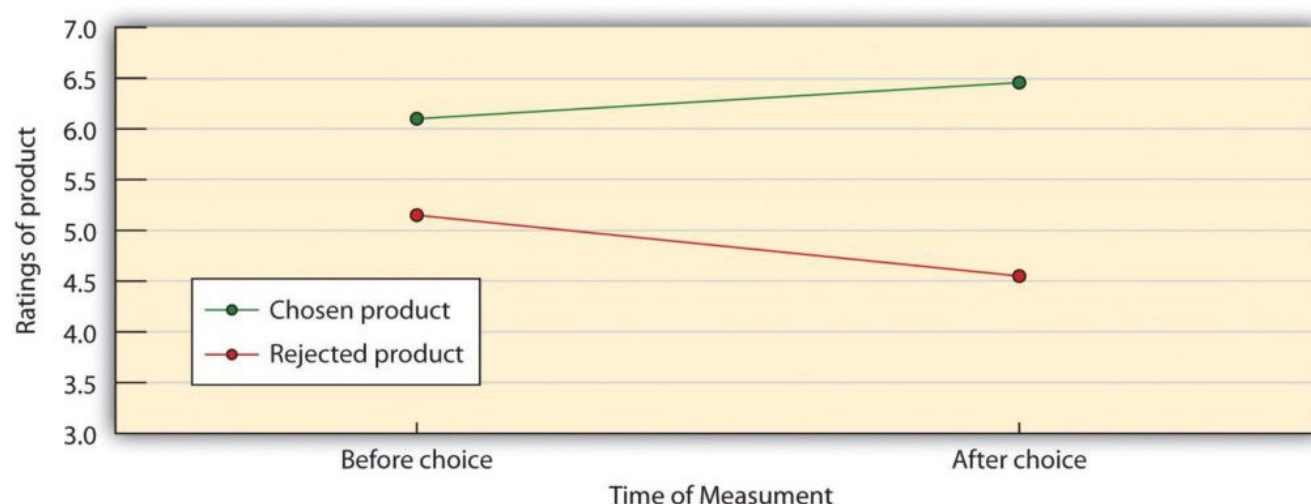
Another time you may have experienced the negative affective state of cognitive dissonance is after you have made an important and irrevocable decision. Imagine that you are about to buy a new car and you have narrowed your search to a small new car and a larger (but much cheaper) used car. The problem is that you can see advantages and disadvantages to each. For instance, the smaller car would get better gas mileage, but the larger car—because it is used—is cheaper. Imagine, however, that you finally decide to buy the larger car because you feel that you really don't have enough money for the new car.

That night, you're lying in bed and wondering about your decision. Although you've enjoyed driving the big car that you have just purchased, you're worried about rising gas costs, the negative impact of the big car on the environment, and the possibility that the car might need a lot of repairs. Have you made the right decision? This "buyer's remorse" can be interpreted in terms of [postdecisional dissonance](#)—*the feeling of regret that may occur after we make an important decision* (Brehm, 1956). However, the principles of dissonance predict that once you make the decision—and regardless of which car you choose—you will convince yourself that you made the right choice. I would predict that since you have chosen the larger car you will begin to think more about the positive aspects of the choice that you have made (what you are going to be able to do with the money you saved, rather than how much more it is going to cost to fill up the gas tank) and at the same time you will likely downplay the values of the smaller car.

Jack Brehm (1956) posed as a representative of a consumer testing service and asked women to rate the attractiveness and desirability of several kinds of appliances, such as toasters and electric coffee makers. Each woman was told that as a reward for having participated in the survey, she could have one of the

appliances as a gift. She was given a choice between two of the products she had rated as being about equally attractive. After she made her decision, her appliance was wrapped up and given to her. Then, 20 minutes later, each woman was asked to rerate all the products. As you can see in Figure 5.7 “[Postdecisional Dissonance](#)”, Brehm found that the women rated the appliance that they had chosen and been given as a gift higher than they had the first time. And the women also lowered their rating of the appliance they might have chosen but decided to reject. These results are of course consistent with the principles of cognitive dissonance—post-decisional dissonance is reduced by focusing on the positive aspects of the chosen product and the negative aspects of the rejected product.

Figure 5.7 – Postdecisional Dissonance



As predicted by the desire to reduce postdecisional dissonance, participants increased the perceived desirability of a product they had chosen and decreased the perceived desirability of a product they did not choose. Data are from Brehm (1956).

What research on cognitive dissonance suggests, then, is that people who are experiencing dissonance will generally try to reduce it. If we fail to lose the weight we wanted to lose, we decide that we look good anyway. If we cheat on an exam, we decide that cheating is OK. If we hurt someone else’s feelings, we may even decide that they are bad people who deserve our negative behavior. To escape from feeling poorly about ourselves, people will engage in quite extraordinary rationalizing. No wonder that most of us believe that “If I had it all to do over again, I would not change anything important.”

Of course, the tendency to justify our past behavior has positive outcomes for our affect. If we are able to convince ourselves that we can do no wrong, we will be happier—at least for today. But the desire to create positive self-esteem can lead to a succession of self-justifications that ultimately result in a chain of irrational actions. The irony is that to avoid thinking of ourselves as bad or immoral, we may set ourselves up for more immoral acts. Once Joachim has convinced himself that his schoolwork is not important, it may be hard to pick it up again. Once a smoker has decided it is OK to smoke, she may just keep smoking. If we spend too much time thinking positively about ourselves we will not learn from our mistakes, nor grow or change. In order to learn from our behavior, it would be helpful to learn to tolerate dissonance long enough to examine the situation critically and dispassionately. We then stand a chance of breaking out of the cycle of action followed by justification, followed by more action.

There is still another potential negative outcome of dissonance: When we have to make choices we may feel that we have made poor ones. Barry Schwartz (2004) has argued that having too many choices can create dissonance and thus the opportunity for regret. When we go to the store and have to pick only one out of 30 different types of chocolates, we have more opportunities for postdecisional dissonance. Although it seems like being allowed to choose would be a good thing, people report being happier when they are given a free gift than when they are given a choice between two similar gifts and have to reject one of them (Hsee & Hastie, 2006).

Social Psychology in the Public Interest

How Salespeople Use Principles of Persuasion

The research that we have discussed in this chapter suggests some of the many ways that we can persuade people to buy our products, to vote for our candidates, and to engage in other behaviors that we would like them to engage in. We have seen that we will be more successful if we use the

right communicators and if we present the right messages under the right conditions. But it must also be kept in mind that a full understanding of the techniques used by persuaders may also be useful to help us avoid being persuaded by others.

Salespeople sometimes make use of the Behavior → Attitude relationship to attempt to persuade others. Regardless of whether the change is due to the cognitive principles of self-perception or the more affective principles of dissonance reduction, the attitude change that follows behavior can be strong and long lasting. This fact creates some very interesting opportunities for changing attitudes.

One approach based on this idea is to get people to move slowly in the desired direction, such that they commit to a smaller act first. The idea is that it will be relatively easy to get people to engage in a small behavior after which their perceptions of this initial behavior will change their attitudes, making it more likely for them to engage in a more costly behavior later. The ***foot-in-the-door technique*** refers to *a persuasion attempt in which we first get the target to accept a rather minor request, and then we ask for a larger request.* **Freedman and Fraser (1966)** asked homeowners if they would be willing to place a small sticker in the window of their house that said “Be a safe driver.” Many of the homeowners agreed to this small request. Then several weeks later, the researchers came back and asked these same homeowners to put a big, ugly “DRIVE CAREFULLY” sign on their lawns. Almost 80% of the homeowners who had agreed to put the sticker in their window later agreed to put the sign up, in comparison to only about 20% who agreed when they were asked about the sign without having been asked about the sticker first. In a more recent study, Nicolas Guéguen (2002) found that students in a computer discussion group were more likely to volunteer to complete a 40-question survey on their food habits (which required 15 to 20 minutes of their time) if they had already, a few minutes earlier, agreed to help the same requestor with a simple computer-related question (about how to convert a file type) than if they had not first been given the smaller

opportunity to help.

You can see that the foot-in-the-door technique is a classic case of self-perception and commitment—once people label themselves as the kind of person who conforms to the requests of others in the relevant domain (“I volunteer to help safe driving campaigns,” “I help people in my discussion group”), it is easier to get them to conform later. Similarly, imagine a restaurant owner who has problems with people who make table reservations but then don’t call to cancel when they can’t come at the appointed time. The restaurant owner could try to reduce the problem by first getting a small commitment. Instead of having the people who take the reservations say, “Please call if you change your plans,” they could instead ask, “Will you call us if you change your plans?” and then wait for the person to say yes. The act of saying yes to a simple request creates commitment to the behavior, and not following through on the promise would be likely to create cognitive dissonance. Since people don’t want to feel that they have violated their commitment, this should reduce the no-show rate.

Another approach based on the attitudes-follow-behavior idea, and which can be used by unscrupulous salespeople, is known as the **low-ball technique**. In this case the salesperson *promises the customer something desirable, such as a low price on a car, with the intention of getting the person to imagine themselves engaging in the desired behavior* (in this case, purchasing the car). After the customer has committed to purchasing the car at a low price, the salesperson then indicates that he or she cannot actually sell the car at that price. In this case people are more likely to buy the car at the higher price than they would have been if the car had first been offered at the higher price. Backing out on a commitment seems wrong and may threaten self-esteem, even if the commitment was obtained in an unethical way.

In research testing the low-ball effect, Guéguen, Pascual, and Dagot (2002) asked people to watch a dog for them while they visited someone in the

hospital. Some participants were told that they would need to watch the dog for 30 minutes. Other participants were first asked simply to commit to watching the dog, and then only later informed that they would have to watch it for 30 minutes. The latter group had been low-balled, and they complied more often with the request.

A close alternative to low-balling is known as the *bait-and-switch technique*, which occurs when someone advertises a product at a very low price. When you visit to the store to buy the product, however, you learn that the product you wanted at the low price has been sold out. An example is a car dealership that advertises a low-priced car in a newspaper ad but doesn't have that car available when you visit the dealership to purchase it. Again, people are more likely to buy an alternative higher-priced product after they have committed themselves to the purchase than they would have been without the original information. Once you imagine yourself owning the car, your attitude toward the car becomes more positive, making the idea of giving it up more costly and also making it more likely that you will buy it.

Key Takeaways

- As predicted by the principle of attitude consistency, if we engage in an unexpected or unusual behavior, our thoughts and feelings toward that behavior are likely to change.
- Self-perception occurs when we use our own behavior as a guide to help us determine our thoughts and feelings.
- Self-perception can lead to either insufficient justification—the perception that there was not enough external threat to avoid engaging in a behavior—or overjustification—the perception that our behavior was caused primarily by external factors.
- Principles of self-perception suggest that to create true attitude change we should avoid using too much punishment or too much reward.
- Cognitive dissonance refers to the discomfort that occurs when we

behave in ways that we see as inappropriate, such as when we fail to live up to our own expectations

- Dissonance is reduced by changing behavior, by reducing dissonant cognitions, or by creating new consonant cognitions to counteract the dissonant cognitions.
- Dissonance is observed in many everyday experiences, including initiation and the experience of post-decisional dissonance.
- Engaging in dissonance reduction has many positive outcomes for our affect but may lead to harmful self-justifications and irrational actions.
- Marketers use the principles of dissonance in their attempts at persuasion. Examples are the foot-in-the-door technique, door-in-the-face technique, low-balling, and the bait-and-switch technique.

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Chapter 6: Stereotypes, Prejudice, and Discrimination

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6.0 Stereotypes, Prejudice, and Discrimination

Beating of Gay Man Leads to Hate Crime Prosecution in New Mexico



Hate crimes are fortunately very rare. They are often followed by vigils like this one in which people come together to express their support for those who have been attacked. [Wikimedia Commons](#) – CC BY 2.0.

On February 27, 2005, James Maestas, a Latino gay man from Santa Fe,

New Mexico, and his companion, Joshua Stockham, were leaving a restaurant when they were approached by five men who started to become violent toward them. One of the assailants, who was 19 years old at the time, stood over Maestas and repeatedly punched him in the face and head. Maestas was taken to St. Vincent Regional Medical Center in Santa Fe where he was treated for a broken nose and a concussion. Because he was kicked so hard in the abdomen, he also required the help of a respirator to breathe.

In the months that followed the attack, people gathered for a vigil to show their support for Maestas and even donated almost \$50,000 to help pay his medical bills. Maestas made a full recovery and said he had plans to begin classes at Santa Fe Community College. He hoped he could sit down one day and have a friendly talk with his attackers.

The assailants were charged with aggravated battery and conspiracy and tried under New Mexico's hate crimes law, which added time to their sentences.

Source: LGBT Hate Crimes Project. (2010). James Maestas. Retrieved from http://www.lgbthatecrimes.org/doku.php/james_maestas.

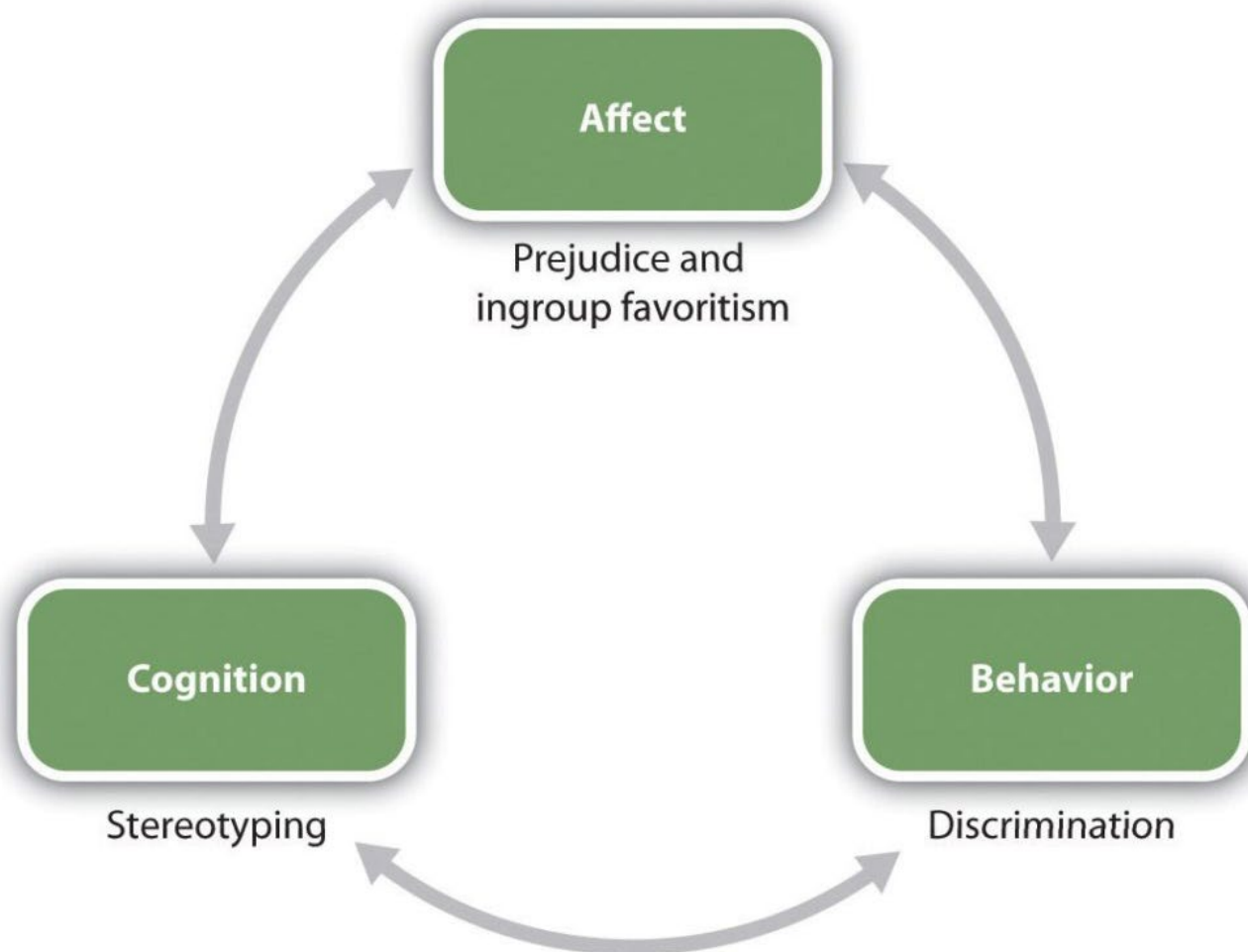
Contemporary increases in globalization and immigration are leading to more culturally diverse populations in the United States and in many other countries. People from minority groups now account for over one third of the U.S. population, as well as most of the growth in its labor force. Older people are working longer, women are becoming more equally represented in a wide variety of jobs, and the ethnic mix of most occupations is also increasing (U.S. Census Bureau, 2011).

These changes will create many benefits for society and for the individuals within it. Gender, cultural, and ethnic diversity can improve creativity and group performance, facilitate new ways of looking at problems, and allow multiple viewpoints on decisions (Mannix & Neale, 2005; van Knippenberg &

Schippers, 2007). On the other hand, as we have seen in many places in this book, perceived similarity is an extremely important determinant of liking. Members of culturally diverse groups may be less attracted to each other than are members of more homogeneous groups, may have more difficulty communicating with each other, and in some cases may actively dislike and even engage in aggressive behavior toward each other.

The principles of [social psychology](#), including the **ABCs—*affect, behavior, and cognition***—apply to the study of stereotyping, [prejudice](#), and [discrimination](#), and social psychologists have expended substantial research efforts studying these concepts (Figure 6.1). The **cognitive component** in our perceptions of group members is the [stereotype](#)—*the positive or negative beliefs that we hold about the characteristics of social groups*. We may decide that “Italians are romantic,” that “old people are boring,” or that “college professors are nerds.” And we may use those beliefs to guide our actions toward people from those groups. In addition to our stereotypes, we may also develop **prejudice**—*an unjustifiable negative attitude toward an outgroup or toward the members of that outgroup*. [Prejudice](#) can take the form of disliking, anger, fear, disgust, discomfort, and even hatred—the kind of **affective** states that can lead to behavior such as the gay bashing you just read about. Our stereotypes and our prejudices are problematic because they may create **discrimination**—*unjustified negative **behaviors** toward members of outgroups based on their group membership*.

Figure 12.1



Inter-Group Antagonism is influenced by the ABCs of social psychology.

Although [violence](#) against members of outgroups is fortunately rare, stereotypes, prejudice, and discrimination nevertheless influence people's lives in a variety of ways. Stereotypes influence our academic performance (Shapiro & Neuberg, 2007), the careers that we chose to follow (Zhang, Schmader, Forbes, 2009), our experiences at work (Fiske & Lee, 2008), and the amount that we are paid for the work that we do (Jackson, 2011; Wood & Eagly, 2010).

Stereotypes and prejudice have a pervasive and often pernicious influence on our responses to others, and also in some cases on our own behaviors. To take one example, social psychological research has found that our stereotypes may in some cases lead to [stereotype threat](#)—*performance decrements that are caused by the knowledge of cultural stereotypes*. Spencer, Steele, and Quinn (1999) found that when women were reminded of the (untrue) stereotype that “women are poor at math” they performed more poorly on math tests than

when they were not reminded of the stereotype, and other research has found stereotype threat in many other domains as well. We'll consider the role of stereotype threat in more detail later in this chapter.

In one particularly disturbing line of research about the influence of prejudice on behaviors, Joshua Correll and his colleagues had White participants participate in an experiment in which they viewed photographs of White and Black people on a computer screen. Across the experiment, the photographs showed the people holding either a gun or something harmless such as a cell phone. The participants were asked to decide as quickly as possible to press a button to “shoot” if the target held a weapon but to “not shoot” if the person did not hold a weapon. Overall, the White participants tended to shoot more often when the person holding the object was Black than when the person holding the object was White, and this occurred even when there was no weapon present (Correll, Park, Judd, & Wittenbrink, 2007; Correll et al., 2007).

Discrimination is a major societal problem because it is so pervasive, takes so many forms, and has such negative effects on so many people. Even people who are paid to be unbiased may discriminate. Price and Wolfers (2007) found that White players in National Basketball Association games received fewer fouls when more of the referees present in the game were White, and Black players received fewer fouls when more of the referees present in the game were Black. The implication is—whether they know it or not—the referees were discriminating on the basis of race or ethnicity.

I'm sure that you have had some experiences where you found yourself responding to another person on the basis of a stereotype or a prejudice, and perhaps the fact that you did surprised you. Perhaps you then tried to get past these beliefs and to react to the person more on the basis of his or her individual characteristics. We like some people and we dislike others—this is natural—but we should not let a person's skin color, gender, age, religion, or ethnic background make these determinations for us. And yet, despite our best intentions, we may end up making friends only with people who are similar to us and perhaps even avoiding people whom we see as different.

In this chapter, we will study the processes by which we develop, maintain, and make use of our stereotypes and our prejudices. We will consider the negative outcomes of those beliefs on the targets of our perceptions, and we will consider ways that we might be able to change those beliefs, or at least help us stop acting upon them. Let’s begin by considering the cognitive side of our group beliefs—focusing primarily on stereotypes—before turning to the important role of feelings in prejudice.

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6.1 Social Categorization and Stereotyping

Learning Objectives

1. Describe the fundamental process of social categorization and its influence on thoughts, feelings, and behavior.
2. Define stereotypes and describe the ways that stereotypes are measured.
3. Review the ways that stereotypes influence our behavior.

Thinking about others in terms of their group memberships is known as [social categorization](#)—*the natural cognitive process by which we place individuals into social groups*. [Social categorization](#) occurs when we think of someone as a man (versus a woman), an old person (versus a young person), a Black person (versus an Asian or White person), and so on (Allport, 1954/1979). Just as we categorize objects into different types, so we categorize people according to their social group memberships. Once we do so, we begin to respond to those people more as members of a social group than as individuals.

Imagine for a moment that two college students, John and Sarah, are talking at a table in the student union at your college or university. At this point, we would probably not consider them to be acting as group members, but rather as two individuals. John is expressing his opinions, and Sarah is expressing hers. Imagine, however, that as the conversation continues, Sarah brings up an assignment that she is completing for her women's studies class. It turns out that John does not think there should be a women's studies program at the college, and he tells Sarah so. He argues that if there is a women's studies

program, then there should be a men's studies program too. Furthermore, he argues that women are getting too many breaks in job hiring and that qualified men are the targets of discrimination. Sarah feels quite the contrary—arguing that women have been the targets of sexism for many, many years and even now do not have the same access to high-paying jobs that men do.

You can see that an interaction that began at individual level, as two individuals conversing, has now turned to the group level, in which John has begun to consider himself as a man, and Sarah has begun to consider herself as a woman. In short, Sarah is now arguing her points not so much for herself as she is as a representative of one of her ingroups—namely, women—and John is acting as a representative of one of his ingroups—namely, men. Sarah feels that her positions are correct, and she believes they are true not only for her but for women in general. And the same is true of John. You can see that these social categorizations may create some potential for misperception, and perhaps even hostility. And John and Sarah may even change their opinions about each other, forgetting that they really like each other as individuals, because they are now responding more as group members with opposing views.

Imagine now that while John and Sarah are still talking, some students from another college, each wearing the hats and jackets of that school, show up in the student union. The presence of these outsiders might change the direction of social categorization entirely, leading both John and Sarah to think of themselves as students at their own college. And this social categorization might lead them to become more aware of the positive characteristics of their college (the excellent basketball team, lovely campus, and intelligent students) in comparison with the characteristics of the other school. Now, rather than perceiving themselves as members of two different groups (men versus women), John and Sarah might suddenly perceive themselves as members of the same social category (students at their college).

Perhaps this example will help you see the flexibility of social categorization. We sometimes think of our relationships with others at the individual level and sometimes at the group level. And which groups we use in social categorization

can change over time and in different situations. I think you would agree that you are more likely to categorize yourself as a member of your college or university when your basketball or football team has just won a really important game, or at your commencement day ceremony, than you would on a normal evening out with your family. In these cases, your membership as a university student is simply more salient and important than it is every day, and you are more likely to categorize yourself accordingly.

Spontaneous Social Categorization

Social categorization occurs spontaneously, without much thought on our part (Crisp & Hewstone, 2007). Shelley Taylor and her colleagues (Taylor, Fiske, Etcoff, & Ruderman, 1978) showed their research participants a slide and tape presentation of three male and three female college students who had supposedly participated in a discussion group. During the presentation, each member of the discussion group made a suggestion about how to advertise a college play. The statements were controlled so that across all the research participants, the statements made by the men and the women were of equal length and quality. Furthermore, one half of the participants were told that when the presentation was over, they would be asked to remember which person had made which suggestion, whereas the other half of the participants were told merely to observe the interaction without attending to anything in particular.

After they had viewed all the statements made by the individuals in the discussion group, the research participants were given a memory test (this was entirely unexpected for the participants who had not been given memory instructions). The participants were shown the list of all the statements that had been made, along with the pictures of each of the discussion group members, and were asked to indicate who had made each of the statements. The research participants were not very good at this task, and yet when they made mistakes, these errors were very systematic.

As you can see in Table 6.1 “Name Confusions”, the mistakes were such that the

statements that had actually been made by a man were more frequently wrongly attributed to another man in the group than to another woman, and the statements actually made by a woman were more frequently attributed to other women in the group than to a man. The participants evidently categorized the speakers by their gender, leading them to make more within-gender than across-gender confusions.

Interestingly, and suggesting that categorization is occurring all the time, the instructions that the participants had been given made absolutely no difference. There was just as much categorization for those who were not given any instructions as for those who were told to remember who said what. Other research using this technique has found that we spontaneously categorize each other on the basis of many other group memberships, including gender, race or ethnicity, academic status (student versus teacher), social roles, and other social categories (Fiske, Haslam, & Fiske, 1991; Stangor, Lynch, Duan, & Glass, 1992).

TABLE 6.1 NAME CONFUSIONS

Instructions	Within race errors	Between race errors
Memory	5.78	4.29
No memory	6.57	4.36

Taylor, Fiske, Etcoff, and Ruderman (1978) demonstrated that people categorized others spontaneously. Even without any instructions to categorize, people nevertheless confused others by their sex.

The conclusion is simple, if perhaps obvious: Social categorization is occurring all around us all the time. Indeed, social categorization occurs so quickly that people may have difficulty not thinking about others in terms of their group memberships.

The Benefits of Social Categorization

The tendency to categorize others is normally quite useful. In some cases, we

categorize because doing so provides us with information about the characteristics of people who belong to certain social groups (Lee, Jussim, & McCauley, 1995). If you found yourself lost in a city, you might look for a police officer or a taxi driver to help you find your way. In this case, social categorization would probably be useful because a police officer or a taxi driver might be particularly likely to know the layout of the city streets. Of course, using social categories will only be informative to the extent that the stereotypes held by the individual about that category are accurate. If police officers were actually not that knowledgeable about the city layout, then using this categorization would not be informative.

It has been argued that there is a kernel of truth in most stereotypes, and this seems to be the case. There is a correlation between how group members perceive the stereotypes of their own groups and how people from other groups perceive those same stereotypes (Judd & Park, 1993; Swim, 1994). This truth may come in part from the roles that individuals play in society. For instance, the stereotypes (which are held by many people) that women are “nurturing” and that men are “dominant” may occur in part because, on average, men and women find themselves in different social roles within a [culture](#) (Eagly & Steffen, 1984). In most cultures, men are more likely to be in higher-status occupations, such as doctors and lawyers, whereas women are more likely to play the role of homemakers and child-care workers. In this sense, the stereotypes are at least partly true for many of the members of the social category, in terms of their actual behaviors. Because men are more likely to be leaders than are women, they may well be, on average, more dominant; and because women are more likely to take care of children, they may, on average, act in a more nurturing way than do men.

On the other hand, we sometimes categorize others not because it seems to provide more information about them but because we may not have the time (or the motivation) to do anything more thorough. Using our stereotypes to size up another person might simply make our life easier (Macrae, Bodenhausen, Milne, & Jetten, 1994). According to this approach, thinking about other people in terms of their social category memberships is a functional way of dealing

with the world—things are complicated, and we reduce complexity by relying on our stereotypes.

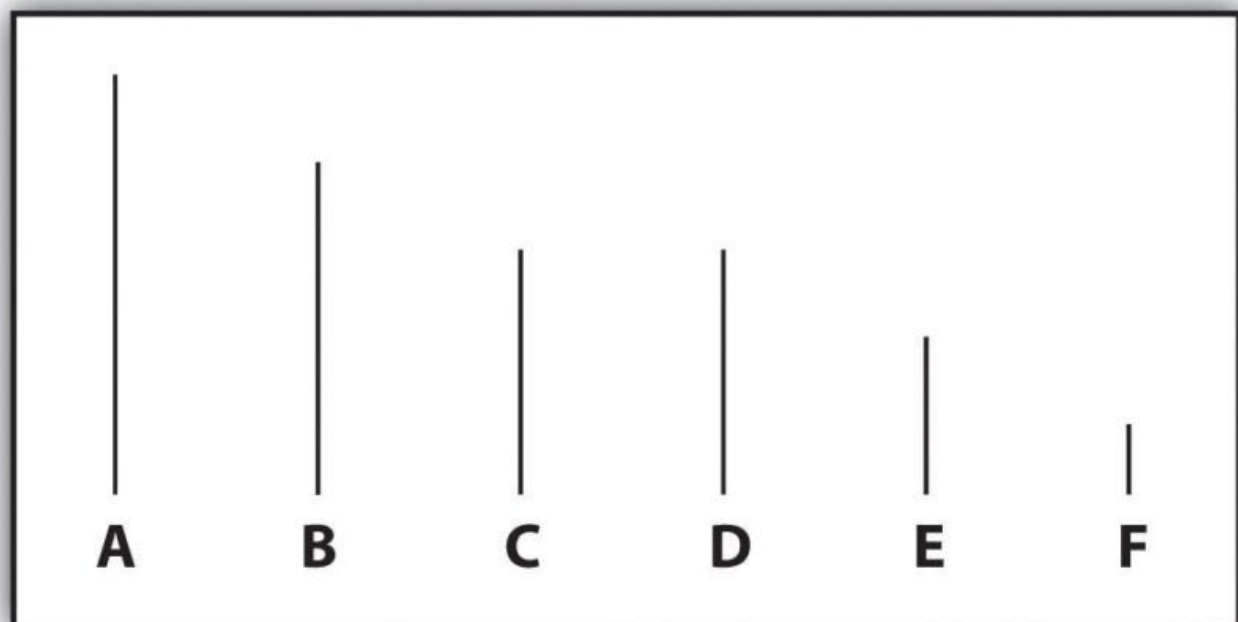
The Negative Outcomes of Social Categorization

Although thinking about others in terms of their social category memberships has some potential benefits for the person who does the categorizing, categorizing others, rather than treating them as unique individuals with their own unique characteristics, has a wide variety of negative, and often very unfair, outcomes for those who are categorized.

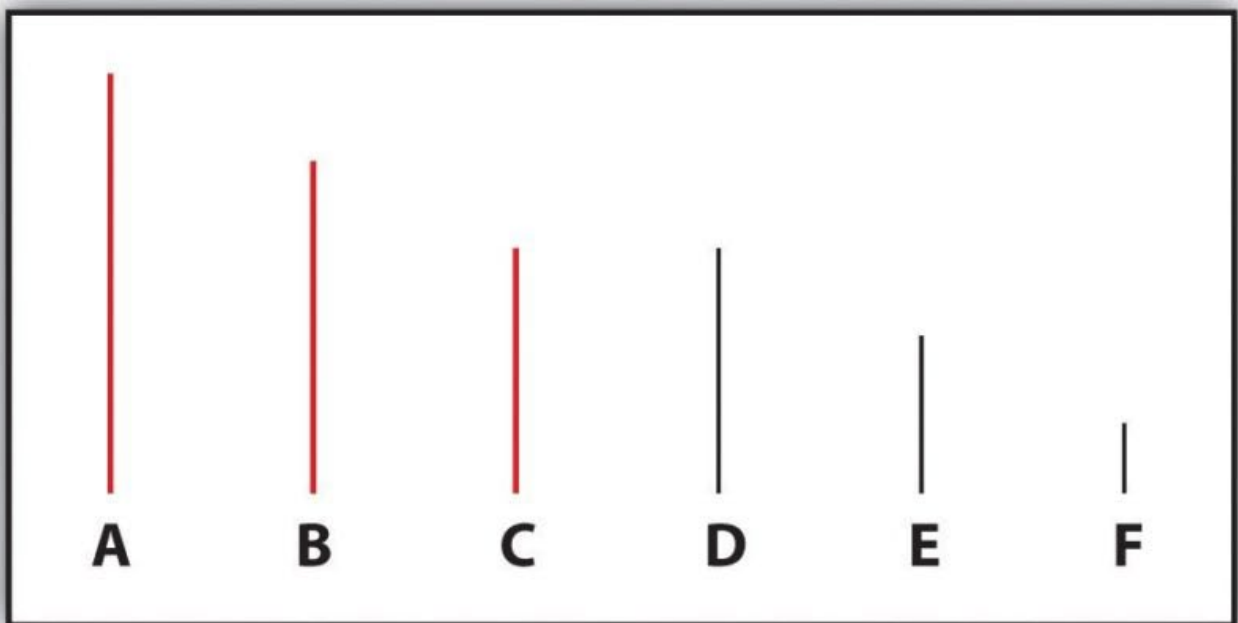
One problem is that social categorization distorts our perceptions such that we tend to exaggerate the differences between people from different social groups while at the same time perceiving members of groups (and particularly outgroups) as more similar to each other than they actually are. This overgeneralization makes it more likely that we will think about and treat all members of a group the same way. Tajfel and Wilkes (1963) performed a simple experiment that provided a picture of the potential outcomes of categorization. As you can see in [Figure 12.4 “Perceptual Accentuation”](#), the experiment involved having research participants judge the length of six lines. In one of the experimental conditions, participants simply saw six lines, whereas in the other condition, the lines were systematically categorized into two groups—one comprising the three shorter lines and one comprising the three longer lines.

Figure 6.4 – Perceptual Accentuation

No categorization condition:



Categorization condition:



Lines C and D were seen as the same length in the noncategorized condition, but line C was perceived as longer than line D when the lines were categorized into two groups. From Tajfel (1970).

Tajfel found that the lines were perceived differently when they were categorized, such that the differences between the groups and the similarities

within the groups were emphasized. Specifically, he found that although lines C and D (which are actually the same length) were perceived as equal in length when the lines were not categorized, line D was perceived as being significantly longer than line C in the condition in which the lines were categorized. In this case, categorization into two groups—the “short lines group” and the “long lines group”—produced a perceptual bias such that the two groups of lines were seen as more different than they really were.

Similar effects occur when we categorize other people. We tend to see people who belong to the same social group as more similar than they actually are, and we tend to judge people from different social groups as more different than they actually are. The tendency to see members of social groups as similar to each other is particularly strong for members of outgroups, resulting in [outgroup homogeneity](#)—*the tendency to view members of outgroups as more similar to each other than we see members of ingroups* (Linville, Salovey, & Fischer, 1986; Ostrom & Sedikides, 1992; Meissner & Brigham, 2001). I’m sure you’ve had this experience yourself, when you found yourself thinking or saying, “Oh, them, they’re all the same!”

Patricia Linville and Edward Jones (1980) gave research participants a list of trait terms and asked them to think about either members of their own group (e.g., Blacks) or members of another group (e.g., Whites) and to place the trait terms into piles that represented different types of people in the group. The results of these studies, as well as other studies like them, were clear: People perceive outgroups as more homogeneous than the [ingroup](#). Just as White people used fewer piles of traits to describe Blacks than Whites, young people used fewer piles of traits to describe elderly people than they did young people, and students used fewer piles for members of other universities than they did for members of their own university.

[Outgroup homogeneity](#) occurs in part because we don’t have as much contact with outgroup members as we do with ingroup members, and the quality of interaction with outgroup members is often more superficial. This prevents us from really [learning](#) about the outgroup members as individuals, and as a

result, we tend to be unaware of the differences among the group members. In addition to learning less about them because we see and interact with them less, we routinely categorize outgroup members, thus making them appear more cognitively similar (Haslam, Oakes, & Turner, 1996).

Once we begin to see the members of outgroups as more similar to each other than they actually are, it then becomes very easy to apply our stereotypes to the members of the groups without having to consider whether the characteristic is actually true of the particular individual. If men think that women are all alike, then they may also think that they all have the same characteristics—they're all “emotional” and “weak.” And women may have similarly simplified beliefs about men (they're “insensitive,” “unwilling to commit,” etc.). The outcome is that the stereotypes become linked to the group itself in a set of mental representations. The stereotypes are “pictures in our heads” of the social groups (Lippman, 1922). These beliefs just seem right and natural, even though they are frequently distorted overgeneralizations (Hirschfeld, 1996; Yzerbyt, Schadron, Leyens, & Rocher, 1994).

Our stereotypes and prejudices are learned through many different processes. This multiplicity of causes is unfortunate because it makes stereotypes and prejudices even more likely to form and harder to change. For one, we learn our stereotypes in part through our communications with parents and peers (Aboud & Doyle, 1996) and from the behaviors we see portrayed in the media (Brown, 1995). Even 5-year-old children have learned cultural norms about the appropriate activities and behaviors for boys and girls and also have developed stereotypes about age, race, and physical attractiveness (Bigler & Liben, 2006). And there is often good agreement about the stereotypes of social categories among the individuals within a given culture. Even today, there is good agreement about the stereotypes of members of many social groups, including men and women and a variety of ethnic groups.

Once they become established, stereotypes (like any other cognitive representation) tend to persevere. We begin to respond to members of stereotyped categories as if we already knew what they were like. Yaacov Trope

and Eric Thompson (1997) found that individuals addressed fewer questions to members of categories about which they had strong stereotypes (as if they already knew what these people were like) and that the questions they did ask were likely to confirm the stereotypes they already had.

In other cases, stereotypes are maintained because information that confirms our stereotypes is better remembered than information that disconfirms them. When we see members of social groups perform behaviors, we tend to better remember information that confirms our stereotypes than we remember information that disconfirms our stereotypes (Fyock & Stangor, 1994). If we believe that women are bad drivers and we see a woman driving poorly, then we tend to remember it, but when we see a woman who drives particularly well, we tend to forget it. This is of course another example of the general principle of [assimilation](#)—we tend to perceive the world in ways that make it fit our existing beliefs more easily than we change our beliefs to fit the reality around us.

And stereotypes become difficult to change because they are so important to us—they become an integral and important part of our everyday lives in our culture. Stereotypes are frequently expressed on TV, in movies, and in chat rooms and blogs, and we learn a lot of our beliefs from these sources. Our friends also tend to hold beliefs similar to ours, and we talk about these beliefs when we get together with them (Schaller & Conway, 1999). In short, stereotypes and [prejudice](#) are powerful largely because they are important [social norms](#) that are part of our culture (Guimond, 2000).

Because they are so highly cognitively accessible, and because they seem so “right,” our stereotypes easily influence our judgments of and responses to those we have categorized. The social psychologist John Bargh once described stereotypes as “cognitive monsters” because their activation was so powerful and because the activated beliefs had such insidious influences on social judgment (Bargh, 1999). Making things even more difficult, stereotypes are strongest for the people who are in most need of change—the people who are most prejudiced (Lepore & Brown, 1997).

Because stereotypes and prejudice often operate out of our awareness, and also because people are frequently unwilling to admit that they hold them, social psychologists have developed methods for assessing them indirectly. In the next section we will consider one of these approaches—the Implicit Association Test (IAT)

Research Focus: Measuring Stereotypes Indirectly

One difficulty in measuring stereotypes and prejudice is that people may not tell the truth about their beliefs. Most people do not want to admit—either to themselves or to others—that they hold stereotypes or that they are prejudiced toward some social groups. To get around this problem, social psychologists make use of a number of techniques that help them measure these beliefs more subtly and indirectly.

Indirect measures of prejudice are also frequently used in social psychological research, for instance—assessing nonverbal behaviors such as speech errors or physical closeness. One common measure involves asking participants to take a seat on a chair near a person from a different racial or ethnic group and measuring how far away the person sits (Sechrist & Stangor, 2001; Word, Zanna, & Cooper, 1974). People who sit farther away are assumed to be more prejudiced toward the members of the group.

Because our stereotypes are activated spontaneously when we think about members of different social groups, it is possible to use reaction-time measures to assess this activation and thus to learn about people's stereotypes and prejudices. In these procedures, participants are asked to make a series of judgments about pictures or descriptions of social groups and then to answer questions as quickly as they can, but without making mistakes. The speed of these

responses is used to determine an individual's stereotypes or prejudice.

The most popular reaction-time implicit measure of prejudice—the ***Implicit Association Test (IAT)***—is frequently used to assess stereotypes and prejudice (Nosek, Greenwald, & Banaji, 2007). In the IAT, participants are asked to classify stimuli that they view on a computer screen into one of two categories by pressing one of two computer keys, one with their left hand and one with their right hand. Furthermore, the categories are arranged such that the responses to be answered with the left and right buttons either “fit with” (match) the [stereotype](#) or do not “fit with” (mismatch) the stereotype. For instance, in one version of the IAT, participants are shown pictures of men and women and also shown words related to gender stereotypes (e.g., *strong*, *leader*, or *powerful* for men and *nurturing*, *emotional*, or *weak* for women). Then the participants categorize the photos (“Is this picture a picture of a man or a woman?”) and answer questions about the stereotypes (“Is this the word *strong*?”) by pressing either the Yes button or the No button using either their left hand or their right hand.

When the responses are arranged on the screen in a “matching” way, such that the male category and the “strong” category are on the same side of the screen (e.g., on the right side), participants can do the task very quickly and they make few mistakes. It’s just easier, because the stereotypes are matched or associated with the pictures in a way that makes sense. But when the images are arranged such that the women and the strong categories are on the same side, whereas the men and the weak categories are on the other side, most participants make more errors and respond more slowly. The basic assumption is that if two concepts are associated or linked, they will be responded to more quickly if they are classified using the same, rather than different, keys.

Implicit association procedures such as the IAT show that even participants who claim that they are not prejudiced do seem to hold cultural stereotypes about social groups. Even Black people themselves respond more quickly to positive words that are associated with White rather than Black faces on the IAT, suggesting that they have subtle racial prejudice toward Blacks.

Because they hold these beliefs, it is possible—although not guaranteed—that they may use them when responding to other people, creating a subtle and unconscious type of discrimination. Although the meaning of the IAT has been debated (Tetlock & Mitchell, 2008), research using implicit measures does suggest that—whether we know it or not, and even though we may try to control them when we can—our stereotypes and prejudices are easily activated when we see members of different social categories (Barden, Maddux, Petty, & Brewer, 2004).

Do you hold implicit prejudices? Try the IAT yourself, here: <https://implicit.harvard.edu/implicit>

Although in some cases the stereotypes that are used to make judgments might actually be true of the individual being judged, in many other cases they are not. Stereotyping is problematic when the stereotypes we hold about a social group are inaccurate overall, and particularly when they do not apply to the individual who is being judged (Stangor, 1995). Stereotyping others is simply unfair. Even if many women are more emotional than are most men, not all are, and it is not right to judge any one woman as if she is.

In the end, **stereotypes become self-fulfilling prophecies**, such that our expectations about the group members make the stereotypes come true (Snyder, Tanke, & Berscheid, 1977; Word, Zanna, & Cooper, 1974). Once we believe that men make better leaders than women, we tend to behave toward men in ways that makes it easier for them to lead. And we behave toward women in ways that makes it more difficult for them to lead. The result? Men

find it easier to excel in leadership positions, whereas women have to work hard to overcome the false beliefs about their lack of leadership abilities (Phelan & Rudman, 2010). And **self-fulfilling prophecies are ubiquitous**—even teachers’ expectations about their students’ academic abilities can influence the students’ school performance (Jussim, Robustelli, & Cain, 2009).

Of course, you may think that you personally do not behave in these ways, and you may not. But research has found that stereotypes are often used out of our awareness, which makes it very difficult for us to correct for them. Even when we think we are being completely fair, we may nevertheless be using our stereotypes to condone discrimination (Chen & Bargh, 1999). And when we are distracted or under time pressure, these tendencies become even more powerful (Stangor & Duan, 1991).

Furthermore, attempting to prevent our stereotype from coloring our reactions to others takes effort. We experience more negative affect (particularly anxiety) when we are with members of other groups than we do when we are with people from our own groups, and we need to use more cognitive resources to control our behavior because of our anxiety about revealing our stereotypes or prejudices (Butz & Plant, 2006; Richeson & Shelton, 2003). When we know that we need to control our expectations so that we do not unintentionally stereotype the other person, we may try to do so—but doing so takes effort and may frequently fail (Macrae, Bodenhausen, Milne, & Jetten, 1994).

Social Psychology in the Public Interest

Stereotype Threat

Our stereotypes influence not only our judgments of others but also our beliefs about ourselves, and even our own performance on important tasks. In some cases, these beliefs may be positive, and they have the effect of making us feel more confident and thus better able to perform tasks. Because Asian students are aware of the stereotype that “Asians are good

at math,” reminding them of this fact before they take a difficult math test can improve their performance on the test (Walton & Cohen, 2003). On the other hand, sometimes these beliefs are negative, and they create negative self-fulfilling prophecies such that we perform more poorly just because of our knowledge about the stereotypes.

One of the long-standing puzzles in the area of academic performance concerns why Black students perform more poorly on standardized tests, receive lower grades, and are less likely to remain in school in comparison with White students, even when other factors such as family income, parents’ education, and other relevant variables are controlled. Claude Steele and Joshua Aronson (1995) tested the hypothesis that these differences might be due to the activation of negative stereotypes. Because Black students are aware of the (inaccurate) stereotype that “Blacks are intellectually inferior to Whites,” this stereotype might create a negative expectation, which might interfere with their performance on intellectual tests through fear of confirming that stereotype.

In support of this hypothesis, Steele and Aronson’s research revealed that Black college students performed worse (in comparison with their prior test scores) on math questions taken from the Graduate Record Examination (GRE) when the test was described to them as being “diagnostic of their mathematical ability” (and thus when the stereotype was relevant) but that their performance was not influenced when the same questions were framed as “an exercise in problem solving.” And in another study, Steele and Aronson found that when Black students were asked to indicate their race before they took a math test (again activating the stereotype), they performed more poorly than they had on prior exams, whereas the scores of White students were not affected by first indicating their race.

Steele and Aronson argued that thinking about negative stereotypes that are relevant to a task that one is performing creates [stereotype threat](#)—*performance decrements that are caused by the knowledge of*

cultural stereotypes. That is, they argued that the negative impact of race on standardized tests may be caused, at least in part, by the performance situation itself. Because the threat is “in the air,” Black students may be negatively influenced by it.

Research has found that the experience of stereotype threat can help explain a wide variety of performance decrements among those who are targeted by negative stereotypes. For instance, when a math task is described as diagnostic of intelligence, Latinos and particularly Latinas perform more poorly than do Whites (Gonzales, Blanton, & Williams, 2002). Similarly, when stereotypes are activated, children with low socioeconomic status perform more poorly in math than do those with high socioeconomic status, and psychology students perform more poorly than do natural science students (Brown, Croizet, Bohnner, Fournet, & Payne, 2003). Even groups who typically enjoy advantaged social status can be made to experience stereotype threat. White men performed more poorly on a math test when they were told that their performance would be compared with that of Asian men (Aronson, Lustina, Good, Keough, & Steele, 1999), and Whites performed more poorly than Blacks on a sport-related task when it was described to them as measuring their natural athletic ability (Stone, 2002).

[Stereotype threat](#) is created in situations that pose a significant threat to [self-concern](#), such that our perceptions of ourselves as important, valuable, and capable individuals are threatened. In these situations, there is a discrepancy between our positive concept of our skills and abilities and the negative stereotypes suggesting poor performance. When our stereotypes lead us to believe that we are likely to perform poorly on a task, we experience a feeling of unease and status threat.

Research has found that stereotype threat is caused by both cognitive and affective factors. On the cognitive side, individuals who are experiencing stereotype threat show an impairment in cognitive processing that is caused by increased vigilance toward the environment and attempts to

suppress their stereotypical thoughts. On the affective side, stereotype threat creates stress as well as a variety of affective responses including anxiety (Schmader, Johns, & Forbes, 2008).

Stereotype threat is not, however, absolute—we can get past it if we try. What is important is to reduce the self-concern that is engaged when we consider the relevant negative stereotypes. Manipulations that affirm positive characteristics about oneself or one's group are successful at **reducing stereotype threat** (Alter, Aronson, Darley, Rodriguez, & Ruble, 2010; Greenberg et al., 2003; McIntyre, Paulson, & Lord, 2003). In fact, just knowing that stereotype threat exists and may influence performance can help alleviate its negative impact (Johns, Schmader, & Martens, 2005).

Key Takeaways

- Beliefs about the characteristics of the groups and the members of those groups are known as stereotypes.
- Prejudice refers to an unjustifiable negative attitude toward an outgroup.
- Stereotypes and prejudice may create discrimination.
- Stereotyping and prejudice begin from social categorization—the natural cognitive process by which we place individuals into social groups.
- Social categorization influences our perceptions of groups—for instance, the perception of outgroup homogeneity.
- Once our stereotypes and prejudices become established, they are difficult to change and may lead to self-fulfilling prophecies, such that our expectations about the group members make the stereotypes come true.
- Stereotypes may influence performance on important tasks through stereotype threat.

Adapted from “Chapter 12.1: [Social Categorization](#) and Stereotyping” of [Principles of Social Psychology](#), 2015, used according to creative commons [CC BY-NC-SA 4.0](#)

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6.1 Social Categorization and Stereotyping

Learning Objectives

1. Describe the fundamental process of social categorization and its influence on thoughts, feelings, and behavior.
2. Define stereotypes and describe the ways that stereotypes are measured.
3. Review the ways that stereotypes influence our behavior.

Thinking about others in terms of their group memberships is known as [social categorization](#)—*the natural cognitive process by which we place individuals into social groups*. [Social categorization](#) occurs when we think of someone as a man (versus a woman), an old person (versus a young person), a Black person (versus an Asian or White person), and so on (Allport, 1954/1979). Just as we categorize objects into different types, so we categorize people according to their social group memberships. Once we do so, we begin to respond to those people more as members of a social group than as individuals.

Imagine for a moment that two college students, John and Sarah, are talking at a table in the student union at your college or university. At this point, we would probably not consider them to be acting as group members, but rather as two individuals. John is expressing his opinions, and Sarah is expressing hers. Imagine, however, that as the conversation continues, Sarah brings up an assignment that she is completing for her women's studies class. It turns out that John does not think there should be a women's studies program at the college, and he tells Sarah so. He argues that if there is a women's studies

program, then there should be a men's studies program too. Furthermore, he argues that women are getting too many breaks in job hiring and that qualified men are the targets of [discrimination](#). Sarah feels quite the contrary—arguing that women have been the targets of sexism for many, many years and even now do not have the same access to high-paying jobs that men do.

You can see that an interaction that began at individual level, as two individuals conversing, has now turned to the group level, in which John has begun to consider himself as a man, and Sarah has begun to consider herself as a woman. In short, Sarah is now arguing her points not so much for herself as she is as a representative of one of her ingroups—namely, women—and John is acting as a representative of one of his ingroups—namely, men. Sarah feels that her positions are correct, and she believes they are true not only for her but for women in general. And the same is true of John. You can see that these social categorizations may create some potential for misperception, and perhaps even hostility. And John and Sarah may even change their opinions about each other, forgetting that they really like each other as individuals, because they are now responding more as group members with opposing views.

Imagine now that while John and Sarah are still talking, some students from another college, each wearing the hats and jackets of that school, show up in the student union. The presence of these outsiders might change the direction of social categorization entirely, leading both John and Sarah to think of themselves as students at their own college. And this social categorization might lead them to become more aware of the positive characteristics of their college (the excellent basketball team, lovely campus, and intelligent students) in comparison with the characteristics of the other school. Now, rather than perceiving themselves as members of two different groups (men versus women), John and Sarah might suddenly perceive themselves as members of the same social category (students at their college).

Perhaps this example will help you see the flexibility of social categorization. We sometimes think of our relationships with others at the individual level and sometimes at the group level. And which groups we use in social categorization

can change over time and in different situations. I think you would agree that you are more likely to categorize yourself as a member of your college or university when your basketball or football team has just won a really important game, or at your commencement day ceremony, than you would on a normal evening out with your family. In these cases, your membership as a university student is simply more salient and important than it is every day, and you are more likely to categorize yourself accordingly.

Spontaneous Social Categorization

Social categorization occurs spontaneously, without much thought on our part (Crisp & Hewstone, 2007). Shelley Taylor and her colleagues (Taylor, Fiske, Etcoff, & Ruderman, 1978) showed their research participants a slide and tape presentation of three male and three female college students who had supposedly participated in a discussion group. During the presentation, each member of the discussion group made a suggestion about how to advertise a college play. The statements were controlled so that across all the research participants, the statements made by the men and the women were of equal length and quality. Furthermore, one half of the participants were told that when the presentation was over, they would be asked to remember which person had made which suggestion, whereas the other half of the participants were told merely to observe the interaction without attending to anything in particular.

After they had viewed all the statements made by the individuals in the discussion group, the research participants were given a memory test (this was entirely unexpected for the participants who had not been given memory instructions). The participants were shown the list of all the statements that had been made, along with the pictures of each of the discussion group members, and were asked to indicate who had made each of the statements. The research participants were not very good at this task, and yet when they made mistakes, these errors were very systematic.

As you can see in Table 6.1 “Name Confusions”, the mistakes were such that the

statements that had actually been made by a man were more frequently wrongly attributed to another man in the group than to another woman, and the statements actually made by a woman were more frequently attributed to other women in the group than to a man. The participants evidently categorized the speakers by their gender, leading them to make more within-gender than across-gender confusions.

Interestingly, and suggesting that categorization is occurring all the time, the instructions that the participants had been given made absolutely no difference. There was just as much categorization for those who were not given any instructions as for those who were told to remember who said what. Other research using this technique has found that we spontaneously categorize each other on the basis of many other group memberships, including gender, race or ethnicity, academic status (student versus teacher), social roles, and other social categories (Fiske, Haslam, & Fiske, 1991; Stangor, Lynch, Duan, & Glass, 1992).

TABLE 6.1 NAME CONFUSIONS

Instructions	Within race errors	Between race errors
Memory	5.78	4.29
No memory	6.57	4.36

Taylor, Fiske, Etcoff, and Ruderman (1978) demonstrated that people categorized others spontaneously. Even without any instructions to categorize, people nevertheless confused others by their sex.

The conclusion is simple, if perhaps obvious: Social categorization is occurring all around us all the time. Indeed, social categorization occurs so quickly that people may have difficulty not thinking about others in terms of their group memberships.

The Benefits of Social Categorization

The tendency to categorize others is normally quite useful. In some cases, we

categorize because doing so provides us with information about the characteristics of people who belong to certain social groups (Lee, Jussim, & McCauley, 1995). If you found yourself lost in a city, you might look for a police officer or a taxi driver to help you find your way. In this case, social categorization would probably be useful because a police officer or a taxi driver might be particularly likely to know the layout of the city streets. Of course, using social categories will only be informative to the extent that the stereotypes held by the individual about that category are accurate. If police officers were actually not that knowledgeable about the city layout, then using this categorization would not be informative.

It has been argued that there is a kernel of truth in most stereotypes, and this seems to be the case. There is a correlation between how group members perceive the stereotypes of their own groups and how people from other groups perceive those same stereotypes (Judd & Park, 1993; Swim, 1994). This truth may come in part from the roles that individuals play in society. For instance, the stereotypes (which are held by many people) that women are “nurturing” and that men are “dominant” may occur in part because, on average, men and women find themselves in different social roles within a [culture](#) (Eagly & Steffen, 1984). In most cultures, men are more likely to be in higher-status occupations, such as doctors and lawyers, whereas women are more likely to play the role of homemakers and child-care workers. In this sense, the stereotypes are at least partly true for many of the members of the social category, in terms of their actual behaviors. Because men are more likely to be leaders than are women, they may well be, on average, more dominant; and because women are more likely to take care of children, they may, on average, act in a more nurturing way than do men.

On the other hand, we sometimes categorize others not because it seems to provide more information about them but because we may not have the time (or the motivation) to do anything more thorough. Using our stereotypes to size up another person might simply make our life easier (Macrae, Bodenhausen, Milne, & Jetten, 1994). According to this approach, thinking about other people in terms of their social category memberships is a functional way of dealing

with the world—things are complicated, and we reduce complexity by relying on our stereotypes.

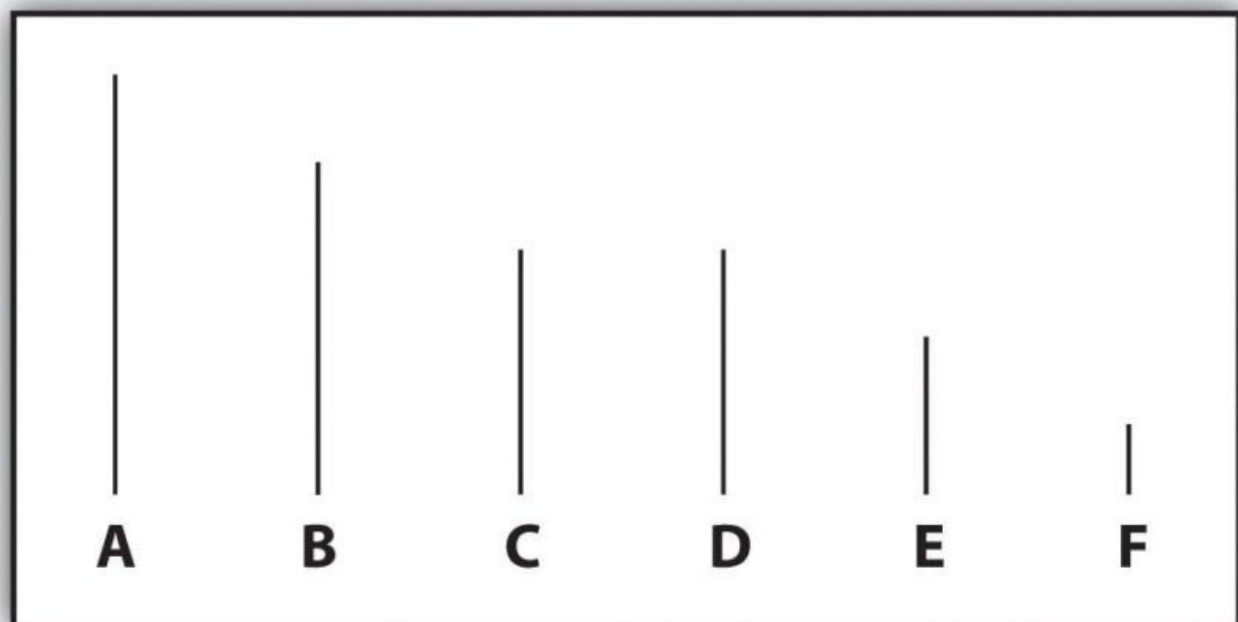
The Negative Outcomes of Social Categorization

Although thinking about others in terms of their social category memberships has some potential benefits for the person who does the categorizing, categorizing others, rather than treating them as unique individuals with their own unique characteristics, has a wide variety of negative, and often very unfair, outcomes for those who are categorized.

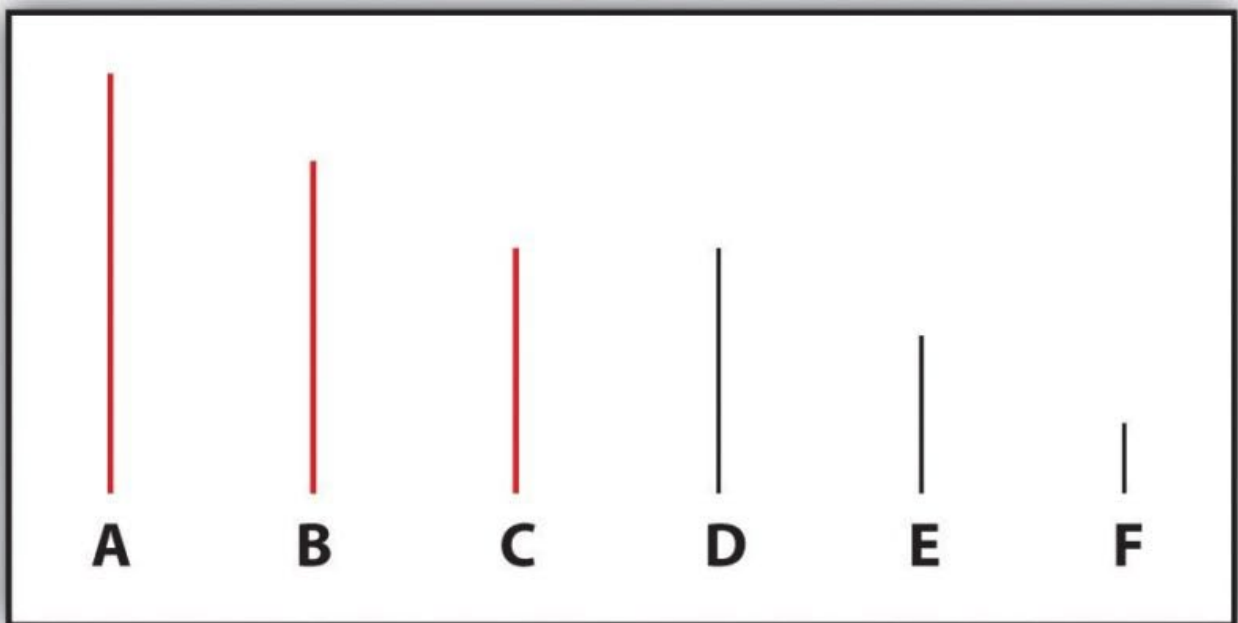
One problem is that social categorization distorts our perceptions such that we tend to exaggerate the differences between people from different social groups while at the same time perceiving members of groups (and particularly outgroups) as more similar to each other than they actually are. This overgeneralization makes it more likely that we will think about and treat all members of a group the same way. Tajfel and Wilkes (1963) performed a simple experiment that provided a picture of the potential outcomes of categorization. As you can see in [Figure 12.4 “Perceptual Accentuation”](#), the experiment involved having research participants judge the length of six lines. In one of the experimental conditions, participants simply saw six lines, whereas in the other condition, the lines were systematically categorized into two groups—one comprising the three shorter lines and one comprising the three longer lines.

Figure 6.4 – Perceptual Accentuation

No categorization condition:



Categorization condition:



Lines C and D were seen as the same length in the noncategorized condition, but line C was perceived as longer than line D when the lines were categorized into two groups. From Tajfel (1970).

Tajfel found that the lines were perceived differently when they were categorized, such that the differences between the groups and the similarities

within the groups were emphasized. Specifically, he found that although lines C and D (which are actually the same length) were perceived as equal in length when the lines were not categorized, line D was perceived as being significantly longer than line C in the condition in which the lines were categorized. In this case, categorization into two groups—the “short lines group” and the “long lines group”—produced a perceptual bias such that the two groups of lines were seen as more different than they really were.

Similar effects occur when we categorize other people. We tend to see people who belong to the same social group as more similar than they actually are, and we tend to judge people from different social groups as more different than they actually are. The tendency to see members of social groups as similar to each other is particularly strong for members of outgroups, resulting in [outgroup homogeneity](#)—*the tendency to view members of outgroups as more similar to each other than we see members of ingroups* (Linville, Salovey, & Fischer, 1986; Ostrom & Sedikides, 1992; Meissner & Brigham, 2001). I’m sure you’ve had this experience yourself, when you found yourself thinking or saying, “Oh, them, they’re all the same!”

Patricia Linville and Edward Jones (1980) gave research participants a list of trait terms and asked them to think about either members of their own group (e.g., Blacks) or members of another group (e.g., Whites) and to place the trait terms into piles that represented different types of people in the group. The results of these studies, as well as other studies like them, were clear: People perceive outgroups as more homogeneous than the [ingroup](#). Just as White people used fewer piles of traits to describe Blacks than Whites, young people used fewer piles of traits to describe elderly people than they did young people, and students used fewer piles for members of other universities than they did for members of their own university.

[Outgroup homogeneity](#) occurs in part because we don’t have as much contact with outgroup members as we do with ingroup members, and the quality of interaction with outgroup members is often more superficial. This prevents us from really [learning](#) about the outgroup members as individuals, and as a

result, we tend to be unaware of the differences among the group members. In addition to learning less about them because we see and interact with them less, we routinely categorize outgroup members, thus making them appear more cognitively similar (Haslam, Oakes, & Turner, 1996).

Once we begin to see the members of outgroups as more similar to each other than they actually are, it then becomes very easy to apply our stereotypes to the members of the groups without having to consider whether the characteristic is actually true of the particular individual. If men think that women are all alike, then they may also think that they all have the same characteristics—they're all “emotional” and “weak.” And women may have similarly simplified beliefs about men (they're “insensitive,” “unwilling to commit,” etc.). The outcome is that the stereotypes become linked to the group itself in a set of mental representations. The stereotypes are “pictures in our heads” of the social groups (Lippman, 1922). These beliefs just seem right and natural, even though they are frequently distorted overgeneralizations (Hirschfeld, 1996; Yzerbyt, Schadron, Leyens, & Rocher, 1994).

Our stereotypes and prejudices are learned through many different processes. This multiplicity of causes is unfortunate because it makes stereotypes and prejudices even more likely to form and harder to change. For one, we learn our stereotypes in part through our communications with parents and peers (Aboud & Doyle, 1996) and from the behaviors we see portrayed in the media (Brown, 1995). Even 5-year-old children have learned cultural norms about the appropriate activities and behaviors for boys and girls and also have developed stereotypes about age, race, and physical attractiveness (Bigler & Liben, 2006). And there is often good agreement about the stereotypes of social categories among the individuals within a given culture. Even today, there is good agreement about the stereotypes of members of many social groups, including men and women and a variety of ethnic groups.

Once they become established, stereotypes (like any other cognitive representation) tend to persevere. We begin to respond to members of stereotyped categories as if we already knew what they were like. Yaacov Trope

and Eric Thompson (1997) found that individuals addressed fewer questions to members of categories about which they had strong stereotypes (as if they already knew what these people were like) and that the questions they did ask were likely to confirm the stereotypes they already had.

In other cases, stereotypes are maintained because information that confirms our stereotypes is better remembered than information that disconfirms them. When we see members of social groups perform behaviors, we tend to better remember information that confirms our stereotypes than we remember information that disconfirms our stereotypes (Fyock & Stangor, 1994). If we believe that women are bad drivers and we see a woman driving poorly, then we tend to remember it, but when we see a woman who drives particularly well, we tend to forget it. This is of course another example of the general principle of [assimilation](#)—we tend to perceive the world in ways that make it fit our existing beliefs more easily than we change our beliefs to fit the reality around us.

And stereotypes become difficult to change because they are so important to us—they become an integral and important part of our everyday lives in our culture. Stereotypes are frequently expressed on TV, in movies, and in chat rooms and blogs, and we learn a lot of our beliefs from these sources. Our friends also tend to hold beliefs similar to ours, and we talk about these beliefs when we get together with them (Schaller & Conway, 1999). In short, stereotypes and [prejudice](#) are powerful largely because they are important [social norms](#) that are part of our culture (Guimond, 2000).

Because they are so highly cognitively accessible, and because they seem so “right,” our stereotypes easily influence our judgments of and responses to those we have categorized. The social psychologist John Bargh once described stereotypes as “cognitive monsters” because their activation was so powerful and because the activated beliefs had such insidious influences on social judgment (Bargh, 1999). Making things even more difficult, stereotypes are strongest for the people who are in most need of change—the people who are most prejudiced (Lepore & Brown, 1997).

Because stereotypes and prejudice often operate out of our awareness, and also because people are frequently unwilling to admit that they hold them, social psychologists have developed methods for assessing them indirectly. In the next section we will consider one of these approaches—the Implicit Association Test (IAT)

Research Focus: Measuring Stereotypes Indirectly

One difficulty in measuring stereotypes and prejudice is that people may not tell the truth about their beliefs. Most people do not want to admit—either to themselves or to others—that they hold stereotypes or that they are prejudiced toward some social groups. To get around this problem, social psychologists make use of a number of techniques that help them measure these beliefs more subtly and indirectly.

Indirect measures of prejudice are also frequently used in social psychological research, for instance—assessing nonverbal behaviors such as speech errors or physical closeness. One common measure involves asking participants to take a seat on a chair near a person from a different racial or ethnic group and measuring how far away the person sits (Sechrist & Stangor, 2001; Word, Zanna, & Cooper, 1974). People who sit farther away are assumed to be more prejudiced toward the members of the group.

Because our stereotypes are activated spontaneously when we think about members of different social groups, it is possible to use reaction-time measures to assess this activation and thus to learn about people’s stereotypes and prejudices. In these procedures, participants are asked to make a series of judgments about pictures or descriptions of social groups and then to answer questions as quickly as they can, but without making mistakes. The speed of these

responses is used to determine an individual's stereotypes or prejudice.

The most popular reaction-time implicit measure of prejudice—the ***Implicit Association Test (IAT)***—is frequently used to assess stereotypes and prejudice (Nosek, Greenwald, & Banaji, 2007). In the IAT, participants are asked to classify stimuli that they view on a computer screen into one of two categories by pressing one of two computer keys, one with their left hand and one with their right hand. Furthermore, the categories are arranged such that the responses to be answered with the left and right buttons either “fit with” (match) the [stereotype](#) or do not “fit with” (mismatch) the stereotype. For instance, in one version of the IAT, participants are shown pictures of men and women and also shown words related to gender stereotypes (e.g., *strong*, *leader*, or *powerful* for men and *nurturing*, *emotional*, or *weak* for women). Then the participants categorize the photos (“Is this picture a picture of a man or a woman?”) and answer questions about the stereotypes (“Is this the word *strong*?”) by pressing either the Yes button or the No button using either their left hand or their right hand.

When the responses are arranged on the screen in a “matching” way, such that the male category and the “strong” category are on the same side of the screen (e.g., on the right side), participants can do the task very quickly and they make few mistakes. It’s just easier, because the stereotypes are matched or associated with the pictures in a way that makes sense. But when the images are arranged such that the women and the strong categories are on the same side, whereas the men and the weak categories are on the other side, most participants make more errors and respond more slowly. The basic assumption is that if two concepts are associated or linked, they will be responded to more quickly if they are classified using the same, rather than different, keys.

Implicit association procedures such as the IAT show that even participants who claim that they are not prejudiced do seem to hold cultural stereotypes about social groups. Even Black people themselves respond more quickly to positive words that are associated with White rather than Black faces on the IAT, suggesting that they have subtle racial prejudice toward Blacks.

Because they hold these beliefs, it is possible—although not guaranteed—that they may use them when responding to other people, creating a subtle and unconscious type of discrimination. Although the meaning of the IAT has been debated (Tetlock & Mitchell, 2008), research using implicit measures does suggest that—whether we know it or not, and even though we may try to control them when we can—our stereotypes and prejudices are easily activated when we see members of different social categories (Barden, Maddux, Petty, & Brewer, 2004).

Do you hold implicit prejudices? Try the IAT yourself, here: <https://implicit.harvard.edu/implicit>

Although in some cases the stereotypes that are used to make judgments might actually be true of the individual being judged, in many other cases they are not. Stereotyping is problematic when the stereotypes we hold about a social group are inaccurate overall, and particularly when they do not apply to the individual who is being judged (Stangor, 1995). Stereotyping others is simply unfair. Even if many women are more emotional than are most men, not all are, and it is not right to judge any one woman as if she is.

In the end, **stereotypes become self-fulfilling prophecies**, such that our expectations about the group members make the stereotypes come true (Snyder, Tanke, & Berscheid, 1977; Word, Zanna, & Cooper, 1974). Once we believe that men make better leaders than women, we tend to behave toward men in ways that makes it easier for them to lead. And we behave toward women in ways that makes it more difficult for them to lead. The result? Men

find it easier to excel in leadership positions, whereas women have to work hard to overcome the false beliefs about their lack of leadership abilities (Phelan & Rudman, 2010). And **self-fulfilling prophecies are ubiquitous**—even teachers’ expectations about their students’ academic abilities can influence the students’ school performance (Jussim, Robustelli, & Cain, 2009).

Of course, you may think that you personally do not behave in these ways, and you may not. But research has found that stereotypes are often used out of our awareness, which makes it very difficult for us to correct for them. Even when we think we are being completely fair, we may nevertheless be using our stereotypes to condone discrimination (Chen & Bargh, 1999). And when we are distracted or under time pressure, these tendencies become even more powerful (Stangor & Duan, 1991).

Furthermore, attempting to prevent our stereotype from coloring our reactions to others takes effort. We experience more negative affect (particularly anxiety) when we are with members of other groups than we do when we are with people from our own groups, and we need to use more cognitive resources to control our behavior because of our anxiety about revealing our stereotypes or prejudices (Butz & Plant, 2006; Richeson & Shelton, 2003). When we know that we need to control our expectations so that we do not unintentionally stereotype the other person, we may try to do so—but doing so takes effort and may frequently fail (Macrae, Bodenhausen, Milne, & Jetten, 1994).

Social Psychology in the Public Interest

Stereotype Threat

Our stereotypes influence not only our judgments of others but also our beliefs about ourselves, and even our own performance on important tasks. In some cases, these beliefs may be positive, and they have the effect of making us feel more confident and thus better able to perform tasks. Because Asian students are aware of the stereotype that “Asians are good

at math,” reminding them of this fact before they take a difficult math test can improve their performance on the test (Walton & Cohen, 2003). On the other hand, sometimes these beliefs are negative, and they create negative self-fulfilling prophecies such that we perform more poorly just because of our knowledge about the stereotypes.

One of the long-standing puzzles in the area of academic performance concerns why Black students perform more poorly on standardized tests, receive lower grades, and are less likely to remain in school in comparison with White students, even when other factors such as family income, parents’ education, and other relevant variables are controlled. Claude Steele and Joshua Aronson (1995) tested the hypothesis that these differences might be due to the activation of negative stereotypes. Because Black students are aware of the (inaccurate) stereotype that “Blacks are intellectually inferior to Whites,” this stereotype might create a negative expectation, which might interfere with their performance on intellectual tests through fear of confirming that stereotype.

In support of this hypothesis, Steele and Aronson’s research revealed that Black college students performed worse (in comparison with their prior test scores) on math questions taken from the Graduate Record Examination (GRE) when the test was described to them as being “diagnostic of their mathematical ability” (and thus when the stereotype was relevant) but that their performance was not influenced when the same questions were framed as “an exercise in problem solving.” And in another study, Steele and Aronson found that when Black students were asked to indicate their race before they took a math test (again activating the stereotype), they performed more poorly than they had on prior exams, whereas the scores of White students were not affected by first indicating their race.

Steele and Aronson argued that thinking about negative stereotypes that are relevant to a task that one is performing creates [stereotype threat](#)—*performance decrements that are caused by the knowledge of*

cultural stereotypes. That is, they argued that the negative impact of race on standardized tests may be caused, at least in part, by the performance situation itself. Because the threat is “in the air,” Black students may be negatively influenced by it.

Research has found that the experience of stereotype threat can help explain a wide variety of performance decrements among those who are targeted by negative stereotypes. For instance, when a math task is described as diagnostic of intelligence, Latinos and particularly Latinas perform more poorly than do Whites (Gonzales, Blanton, & Williams, 2002). Similarly, when stereotypes are activated, children with low socioeconomic status perform more poorly in math than do those with high socioeconomic status, and psychology students perform more poorly than do natural science students (Brown, Croizet, Bohnner, Fournet, & Payne, 2003). Even groups who typically enjoy advantaged social status can be made to experience stereotype threat. White men performed more poorly on a math test when they were told that their performance would be compared with that of Asian men (Aronson, Lustina, Good, Keough, & Steele, 1999), and Whites performed more poorly than Blacks on a sport-related task when it was described to them as measuring their natural athletic ability (Stone, 2002).

[Stereotype threat](#) is created in situations that pose a significant threat to [self-concern](#), such that our perceptions of ourselves as important, valuable, and capable individuals are threatened. In these situations, there is a discrepancy between our positive concept of our skills and abilities and the negative stereotypes suggesting poor performance. When our stereotypes lead us to believe that we are likely to perform poorly on a task, we experience a feeling of unease and status threat.

Research has found that stereotype threat is caused by both cognitive and affective factors. On the cognitive side, individuals who are experiencing stereotype threat show an impairment in cognitive processing that is caused by increased vigilance toward the environment and attempts to

suppress their stereotypical thoughts. On the affective side, stereotype threat creates stress as well as a variety of affective responses including anxiety (Schmader, Johns, & Forbes, 2008).

Stereotype threat is not, however, absolute—we can get past it if we try. What is important is to reduce the self-concern that is engaged when we consider the relevant negative stereotypes. Manipulations that affirm positive characteristics about oneself or one's group are successful at **reducing stereotype threat** (Alter, Aronson, Darley, Rodriguez, & Ruble, 2010; Greenberg et al., 2003; McIntyre, Paulson, & Lord, 2003). In fact, just knowing that stereotype threat exists and may influence performance can help alleviate its negative impact (Johns, Schmader, & Martens, 2005).

Key Takeaways

- Beliefs about the characteristics of the groups and the members of those groups are known as stereotypes.
- Prejudice refers to an unjustifiable negative attitude toward an outgroup.
- Stereotypes and prejudice may create discrimination.
- Stereotyping and prejudice begin from social categorization—the natural cognitive process by which we place individuals into social groups.
- Social categorization influences our perceptions of groups—for instance, the perception of outgroup homogeneity.
- Once our stereotypes and prejudices become established, they are difficult to change and may lead to self-fulfilling prophecies, such that our expectations about the group members make the stereotypes come true.
- Stereotypes may influence performance on important tasks through stereotype threat.

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6.2 Ingroup Favoritism and Prejudice

Learning Objectives

1. Review the causes and outcomes of ingroup favoritism.
2. Summarize the results of Henri Tajfel's research on minimal groups.
3. Outline the personality and cultural variables that influence ingroup favoritism.

We have now seen that [social categorization](#) occurs whenever we think about others in terms of their category memberships rather than on the basis of other, more personal information about the individual. And we have seen that social categorization can have a variety of negative consequences for the people who are the targets of our stereotypes. But social categorization becomes even more important, and has even more powerful effects upon our reactions to others, when the categorization becomes more emotionally involving, and particularly when the categorization involves categorization into liked ingroups and potentially disliked outgroups (Amodio & Devine, 2006).

Because our ancestors lived in small social groups that were frequently in conflict with other groups, it was evolutionarily functional for them to view members of other groups as different and potentially dangerous (Brewer & Caporael, 2006; Navarrete, Kurzban, Fessler, & Kirkpatrick, 2004).

Differentiating between “us” and “them” probably helped keep us safe and free from disease, and as a result, the human brain became very efficient in making these distinctions (Mahajan et al., 2011; Phelps et al., 2000; Van Vugt & Schaller, 2008; Zaraté, Stoeber, MacLin, & Arms-Chavez, 2008). The problem



is that these naturally occurring tendencies may lead us to prefer people who are like us, and in some cases even to unfairly reject people from outgroups.

Liking “Us” More Than “Them”: Ingroup Favoritism

In his important research on group perceptions, Henri Tajfel and his colleagues (Tajfel, Billig, Bundy, & Flament, 1971) demonstrated how incredibly powerful the role of [self-concern](#) is in group perceptions. He found that just dividing people into arbitrary groups produces [ingroup favoritism](#)—*the tendency to respond more positively to people from our ingroups than we do to people from outgroups*.

In Tajfel’s research, small groups of high school students came to his laboratory for a study supposedly concerning “artistic tastes.” The students were first shown a series of paintings by two contemporary artists, Paul Klee and Wassily Kandinsky. Supposedly on the basis of their preferences for each painting, the students were divided into two groups (they were called the X group and the Y group). Each boy was told which group he had been assigned to and that different boys were assigned to different groups. But none of them were told the group memberships of any of the other boys.

The boys were then given a chance to allocate points to other boys in their own group and to boys in the other group (but never to themselves) using a series of payoff matrices, such as those shown in Figure 6.7 “Examples of Matrices Used in the Minimal Intergroup Studies of Tajfel and His Colleagues”. The charts divided a given number of rewards between two boys, and the boys thought that the rewards would be used to determine how much each boy would be paid for his participation. In some cases, the division was between two boys in the boy’s own group (the [ingroup](#)); in other cases, the division was between two boys who had been assigned to the other group (the outgroup); and in still other cases, the division was between a boy in the ingroup and a boy in the outgroup. Tajfel then examined the goals that the boys used when they divided up the points.

Figure 6.7 – Examples of Matrices Used in the Minimal Intergroup Studies of Tajfel and His Colleagues From Tajfel (1970).

Ingroup	19	18	17	16	15	14	13	12	11	10	9	8	7
Outgroup	1	3	5	7	9	11	13	15	17	19	31	23	25
Ingroup	23	22	21	20	19	18	17	16	15	14	13	12	11
Outgroup	5	7	9	11	13	15	17	19	21	23	25	27	29
Ingroup	7	8	9	10	11	12	13	14	15	16	17	18	19
Outgroup	1	3	5	7	9	11	13	15	17	19	21	23	25
Ingroup	11	12	13	14	15	16	17	18	19	20	21	22	23
Outgroup	5	7	9	11	13	15	17	19	21	23	25	27	29

A comparison of the boys' choices in the different matrices showed that they allocated points between two boys in the ingroup or between two boys in the outgroup in an essentially fair way, so that each boy got the same amount. However, fairness was not the predominant approach when dividing points between ingroup and outgroup. In this case, rather than exhibiting fairness, the boys displayed ingroup favoritism, such that they gave more points to other members of their own group in relationship to boys in the other group. For instance, the boys might assign 8 points to the ingroup boy and only 3 points to the outgroup boy, even though the matrix also contained a choice in which they could give the ingroup and the outgroup boys 13 points each. In short, the boys preferred to maximize the gains of the other boys in their own group in comparison with the boys in the outgroup, even if doing so meant giving their own group members fewer points than they could otherwise have received.

Perhaps the most striking part of Tajfel's results is that ingroup favoritism was found to occur on the basis of such arbitrary and unimportant groupings. In fact, ingroup favoritism occurs even when the assignment to groups is on such trivial things as whether people "overestimate" or "underestimate" the number of dots shown on a display, or on the basis of a completely random coin toss (Billig & Tajfel, 1973; Locksley, Ortiz, & Hepburn, 1980). Tajfel's research, as well other research demonstrating ingroup favoritism, provides a powerful

demonstration of a very important social psychological process: Groups exist simply because individuals perceive those groups as existing. Even in a case where there really is no group (at least no meaningful group in any real sense), we still perceive groups and still demonstrate ingroup favoritism.

The Outcomes of Ingroup Favoritism

The tendency to favor their ingroup develops quickly in young children, beginning at the age of 3 years and increasing up to about 6 years of age, and almost immediately begins to influence their behavior (Aboud, 2003; Aboud & Amato, 2001). Young children show greater liking for peers of their own sex and race and typically play with same-sex others after the age of 3. And there is a norm that we should favor our ingroups: People like people who express ingroup favoritism better than those who are more egalitarian (Castelli & Carraro, 2010). [Ingroup favoritism](#) is found for many different types of social groups, in many different settings, on many different dimensions, and in many different cultures (Bennett et al., 2004; Pinter & Greenwald, 2011). [Ingroup](#) favoritism also occurs on trait ratings, such that ingroup members are rated as having more positive characteristics than are outgroup members (Hewstone, 1990). People also take credit for the successes of other ingroup members, remember more positive than negative information about ingroups, are more critical of the performance of outgroup than of ingroup members, and believe that their own groups are less prejudiced than are outgroups (Shelton & Richeson, 2005).

People also talk differently about their ingroups than their outgroups, such that they describe the ingroup and its members as having broad positive traits (“We are generous and friendly”) but describe negative ingroup behaviors in terms of the specific behaviors of single group members (“Our group member, Bill, hit someone”) (Maass & Arcuri, 1996; Maass, Ceccarielli, & Rudin, 1996; von Hippel, Sekaquaptewa, & Vargas, 1997). These actions allow us to spread positive characteristics to all members of our ingroup but reserve negative aspects for individual group members, thereby protecting the group’s image.

People also make trait attributions in ways that benefit their ingroups, just as they make trait attributions that benefit themselves. This general tendency, known as the ultimate attribution error, results in the tendency for each of the competing groups to perceive the other group extremely and unrealistically negatively (Hewstone, 1990). When an ingroup member engages in a positive behavior, we tend to see it as a stable internal characteristic of the group as a whole. Similarly, negative behaviors on the part of the outgroup are seen as caused by stable negative group characteristics. On the other hand, negative behaviors from the ingroup and positive behaviors from the outgroup are more likely to be seen as caused by temporary situational variables or by behaviors of specific individuals and are less likely to be attributed to the group.

Ingroup Favoritism Has Many Causes

Ingroup favoritism has a number of causes. For one, it is a natural part of social categorization—we categorize into ingroups and outgroups because it helps us simplify and structure our environment. It is easy, and perhaps even natural, to believe in the simple idea that “we are better than they are.” People who report that they have strong needs for simplifying their environments also show more ingroup favoritism (Stangor & Leary, 2006).

Ingroup favoritism also occurs at least in part because we belong to the ingroup and not the outgroup (Cadinu & Rothbart, 1996). We like people who are similar to ourselves, and we perceive other ingroup members as similar to us. This also leads us to favor other members of our ingroup, particularly when we can clearly differentiate them from members of outgroups. We may also prefer ingroups because they are more familiar to us (Zebrowitz, Bronstad, & Lee, 2007).

But the most important determinant of ingroup favoritism is simple self-enhancement. We want to feel good about ourselves, and seeing our ingroups positively helps us do so (Brewer, 1979). Being a member of a group that has positive characteristics provides us with the feelings of social identity—*the positive self-esteem that we get from our group memberships*. When we can

identify ourselves as a member of a meaningful social group, even if it is a relatively trivial one, we can feel better about ourselves.

We are particularly likely to show ingroup favoritism when we feel threatened or otherwise worried about our self-concept (Maner et al., 2005; Solomon, Greenberg, & Pyszczynski, 2000). And people express higher self-esteem after they have been given the opportunity to derogate outgroups, suggesting that ingroup favoritism does make us feel good (Lemyre & Smith, 1985; Rubin & Hewstone, 1998). Furthermore, when individuals feel that the value of their ingroup is being threatened, they respond as if they are trying to regain their own self-worth—by expressing more positive attitudes toward ingroups and more negative attitudes toward outgroups (Branscombe, Wann, Noel, & Coleman, 1993; Spears, Doosje, & Ellemers, 1997). Fein and Spencer (1997) found that participants expressed less [prejudice](#) after they had been given the opportunity to affirm and make [salient](#) an important and positive part of their own self-concept. In short, when our group seems to be good, we feel good; when our group seems to be bad, we feel bad.

In some cases, we may be able to feel good about our group memberships even when our own individual outcomes are not so positive. Schmitt, Silvia, and Branscombe (2000) had groups of female college students perform a creativity task and then gave them feedback indicating that although they themselves had performed very poorly, another woman in their group had performed very well. Furthermore, in some experimental conditions, the women were told that the research was comparing the scores of men and women (which was designed to increase categorization by gender). In these conditions, rather than being saddened by the upward comparison with the other woman, participants used the successful performance of the other woman to feel good about themselves, as women.

When Ingroup Favoritism Does Not Occur

Although people have a general tendency to show ingroup favoritism, there are least some cases in which it does not occur. One situation in which ingroup

favoritism is unlikely is when the members of the ingroup are clearly inferior to other groups on an important dimension. The players on a baseball team that has not won a single game all season are unlikely to be able to feel very good about themselves as a team and are pretty much forced to concede that the outgroups are better, at least as far as playing baseball is concerned. Members of low-status groups show less ingroup favoritism than do members of high-status groups and may even display outgroup favoritism, in which they admit that the other groups are better than they are (Clark & Clark, 1947).

Another case in which people judge other members of the ingroup very negatively occurs when a member of one's own group behaves in a way that threatens the positive image of the ingroup. A student who behaves in a way unbecoming to university students, or a teammate who does not seem to value the importance of the team, is disparaged by the other group members, often more than the same behavior from an outgroup member would be. *There is strong devaluation of ingroup members who threaten the positive image and identity of the ingroup.*

Personality and Cultural Determinants of Ingroup Favoritism

To this point, we have considered ingroup favoritism as a natural part of everyday life. Because the tendency to favor the ingroup is a normal byproduct of self-concern, most people do, by and large, prefer their ingroups over outgroups. And yet not everyone is equally ingroup-favoring in all situations. There are a number of individual difference measures that predict prejudice, and these differences become particularly likely to show up under circumstances in which the desire to protect the self becomes important (Guimond, Dambrun, Michinov, & Duarte, 2003).

A personality dimension that relates to the desires to protect and enhance the self and the ingroup and thus also relates to greater ingroup favoritism, and in some cases prejudice toward outgroups, is the personality dimension of

[authoritarianism](#) (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Altemeyer, 1988). [Authoritarianism](#) is a personality dimension that characterizes people who prefer things to be simple rather than complex and who tend to hold traditional and conventional values. Authoritarians are ingroup-favoring in part because they have a need to self-enhance and in part because they prefer simplicity and thus find it easy to think simply: “We are all good and they are all less good.” Political conservatives tend to show more ingroup favoritism than do political liberals, perhaps because the former are more concerned with protecting the ingroup from threats posed by others (Jost, Glaser, Kruglanski, & Sulloway, 2003; Stangor & Leary, 2006).

People with strong goals toward [other-concern](#) display less ingroup favoritism and less prejudice. People who view it as particularly important to connect with and respect other people—those who are more focused on tolerance and fairness toward others—are less ingroup-favoring and more positive toward the members of groups other than their own. The desire to be fair and to accept others can be assessed by individual difference measures such as desire to control one’s prejudice (Plant & Devine, 1998) and humanism (Katz & Hass, 1988).

[Social dominance orientation \(SDO\)](#) is a personality variable that refers to the tendency to see and to accept inequality among different groups (Pratto, Sidanius, Stallworth, & Malle, 1995). People who score high on measures of SDO believe that there are and should be status differences among social groups, and they do not see these as wrong. High SDO individuals agree with statements such as “Some groups of people are simply inferior to other groups,” “In getting what you want, it is sometimes necessary to use force against other groups,” and “It’s OK if some groups have more of a chance in life than others.” Those who are low on SDO, on the other hand, believe that all groups are relatively equal in status and tend to disagree with these statements. People who score higher on SDO also show greater ingroup favoritism.

Stereotyping and prejudice also varies across cultures. Spencer-Rodgers, Williams, Hamilton, Peng, and Wang (2007) tested the hypothesis that Chinese

participants, because of their collectivist orientation, would find social groups more important than would Americans (who are more individualistic) and that as a result, they would be more likely to infer personality traits on the basis of group membership—that is, to [stereotype](#). Supporting the hypothesis, they found that Chinese participants made stronger stereotypical trait inferences than Americans did on the basis of a target’s membership in a fictitious group.

Key Takeaways

- Ingroup favoritism is a fundamental and evolutionarily functional aspect of human perception, and it occurs even in groups that are not particularly meaningful.
- Ingroup favoritism is caused by a variety of variables, but particularly important is self-concern: We experience positive social identity as a result of our membership in valued social groups.
- Ingroup favoritism develops early in children and influences our behavior toward ingroup and outgroup members in a variety of ways.
- Personality dimensions that relate to ingroup favoritism include authoritarianism and social dominance orientation—dimensions that relate to less ingroup favoritism include a desire to control one’s prejudice and humanism.
- There are at least some cultural differences in the tendency to show ingroup favoritism and to stereotype others.

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6.3 Reducing Discrimination

Learning Objectives

1. Review the causes of discrimination and the ways that we can reduce it.
2. Summarize the conditions under which intergroup contact does or does not reduce prejudice and discrimination.

We have seen that [social categorization](#) is a basic part of human nature and one that helps us to simplify our social worlds, to draw quick (if potentially inaccurate) conclusions about others, and to feel good about ourselves. In many cases, our preferences for ingroups may be relatively harmless—we may prefer to socialize with people who share our race or ethnicity, for instance, but without particularly disliking the others. But categorizing others may also lead to [prejudice](#) and [discrimination](#), and it may even do so without our awareness. Because prejudice and discrimination are so harmful to so many people, we must all work to get beyond them.

[Discrimination](#) influences the daily life of its victims in areas such as employment, income, financial opportunities, housing and educational opportunities, and medical care. Discrimination has been blamed for the large percentage of Blacks living in poverty and for their lack of access to high-paying jobs (Williams & Rucker, 1996). Blacks have higher mortality rates than Whites for 8 of the 10 leading causes of death in the United States (Williams, 1999) and have less access to and receive poorer-quality health care, even controlling for other variables such as level of health insurance. Suicide rates among lesbians and gays are substantially higher than rates for the general population, and it



has been argued that this in part due to the negative outcomes of prejudice, including negative attitudes and resulting social isolation (Halpert, 2002). And in some rare cases, discrimination even takes the form of hate crimes such as gay bashing.

More commonly, members of minority groups also face a variety of small hassles, such as bad service in restaurants, being stared at, and being the target of jokes (Swim, Hyers, Cohen, Fitzgerald, & Bylsma, 2003). But even these everyday “minor” forms of discrimination can be problematic because they may produce anger and anxiety among stigmatized group members and may lead to stress and other psychological problems (Klonoff, Landrine, & Campbell, 2000; Klonoff, Landrine, & Ullman, 1999). Stigmatized individuals who report experiencing more exposure to discrimination or other forms of unfair treatment also report more depression, anger, and anxiety and lower levels of life satisfaction and happiness (Swim, Hyers, Cohen, & Ferguson, 2001).

Of course most of us do try to keep our stereotypes and our prejudices out of mind, and we work hard to avoid discriminating (Richeson & Shelton, 2007). But even when we work to keep our negative beliefs under control, this does not mean that they easily disappear. Neil Macrae and his colleagues (Macrae, Bodenhausen, Milne, & Jetten, 1994) asked British college students to write a paragraph describing a skinhead (a member of a group that is negatively stereotyped in England). One half of the participants were asked to be sure to not use their stereotypes when they were judging him, whereas the other half simply wrote whatever came to mind. Although the participants who were asked to suppress their thoughts were able to do it, this suppression didn’t last very long. After they had suppressed their stereotypes, these beliefs quickly popped back into mind, making it even more likely that they would be used immediately later.

But stereotypes are not always and inevitably activated when we encounter people from other groups. We can and we do get past them, although doing so may take some effort on our part (Blair, 2002). There are a number of techniques that we can use to try to improve our attitudes toward outgroups,

and at least some of them have been found to be effective. Kawakami, Dovidio, Moll, Hermsen, and Russin (2000) found that students who practiced responding in nonstereotypical ways to members of other groups became better able to avoid activating their negative stereotypes on future occasions. And a number of studies have found that we become less prejudiced when we are exposed to and think about group members who have particularly positive or nonstereotypical characteristics. For instance, Blair, Ma, and Lenton (2001) asked their participants to imagine a woman who was “strong” and found that doing so decreased stereotyping of women. Similarly, Bodenhausen, Schwarz, Bless, and Wanke (1995) found that when White students thought about positive Black role models—such as Oprah Winfrey and Michael Jordan—they became less prejudiced toward Blacks.

Reducing Discrimination by Changing Social Norms

One variable that makes us less prejudiced is education. People who are more educated express fewer stereotypes and prejudice in general. This is true for students who enroll in courses that are related to stereotypes and prejudice, such as a course on gender and ethnic diversity (Rudman, Ashmore, & Gary, 2001), and is also true more generally—education reduces prejudice, regardless of what particular courses you take (Sidanius, Sinclair, & Pratto, 2006).

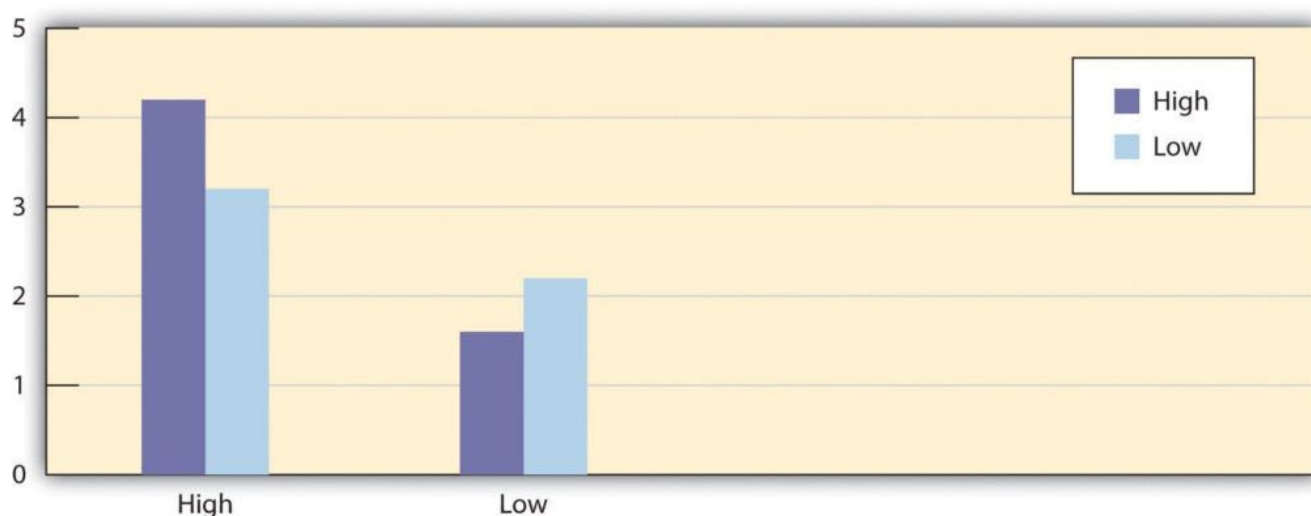
The effects of education on reducing prejudice are probably due in large part to the new [social norms](#) that people are introduced to in school. [Social norms](#) define what is appropriate and inappropriate, and we can effectively change stereotypes and prejudice by changing the relevant norms about them. Jetten, Spears, and Manstead (1997) manipulated whether students thought that the other members of their university favored equal treatment of others or believed that others thought it was appropriate to favor the [ingroup](#). They found that perceptions of what the other group members believed had an important influence on the beliefs of the individuals themselves. The students were more likely to show [ingroup favoritism](#) when they believed that the norm of their

ingroup was to do so, and this tendency was increased for students who had high social identification with the ingroup.

Sechrist and Stangor (2001) selected White college students who were either high or low in prejudice toward Blacks and then provided them with information indicating that their prejudiced or unprejudiced beliefs were either shared or not shared by the other students at their university. Then the students were asked to take a seat in a hallway to wait for the next part of the experiment. A Black confederate was sitting in one seat at the end of the row, and the dependent measure was how far away the students sat from her.

As you can see in Figure 6.8 “The Role of Norms in Intergroup Behavior”, high prejudice students who learned that other students were also prejudiced sat farther away from the Black confederate in comparison with high prejudice individuals who were led to believe that their beliefs were not shared. On the other hand, students who were initially low in prejudice and who believed these views were shared sat closer to the Black confederate in comparison with low prejudice individuals who were led to believe that their beliefs were not shared. These results demonstrate that our perceptions of relevant social norms can strengthen or weaken our tendencies to engage in discriminatory behaviors.

Figure 6.8 – The Role of Norms in Intergroup Behavior



White college students who were low in prejudice toward Blacks sat closer to the Black confederate when they had been told that their beliefs were shared with other group members at their university. On the other hand, White college students who were high

in prejudice sat farther away from the Black confederate when they had been told that their beliefs were shared with other group members at their university. Data are from Sechrist and Stangor (2001).

The influence of social norms is powerful, and long-lasting changes in beliefs about outgroups will occur only if they are supported by changes in social norms. [Prejudice](#) and discrimination thrive in environments in which they are perceived to be the norm, but they die when the existing social norms do not allow it. And because social norms are so important, the behavior of individuals can help create or reduce prejudice and discrimination. Discrimination, prejudice, and even hate crimes such as gay bashing will be more likely to continue if people do not respond to or confront them when they occur.

What this means is that if you believe that prejudice is wrong, you should confront it when you see it happening. Czopp, Monteith, and Mark (2006) had White participants participate in a task in which it was easy to unintentionally [stereotype](#) a Black person, and as a result, many of the participants did so. Then, confederates of the experimenter confronted the students about their stereotypes, saying things such as “Maybe it would be good to think about Blacks in other ways that are a little more fair?” or “It just seems that you sound like some kind of racist to me. You know what I mean?” Although the participants who had been confronted experienced negative feelings about the confrontation and also expressed negative opinions about the person who confronted them, the confrontation did work. The students who had been confronted expressed less prejudice and fewer stereotypes on subsequent tasks than did the students who had not been confronted.

As this study concluded, taking steps to reduce prejudice is everyone’s duty—having a little courage can go a long way in this regard. Confronting prejudice can lead other people to think that we are complaining and therefore to dislike us (Kaiser & Miller, 2001; Shelton & Stewart, 2004), but confronting prejudice is not all negative for the person who confronts. Although it is embarrassing to do so, particularly if we are not completely sure that the behavior was in fact prejudice, when we fail to confront, we may frequently later feel guilty that we did not (Shelton, Richeson, Salvatore, & Hill, 2006).

Reducing Prejudice Through Intergroup Contact

One of the reasons that people may hold stereotypes and prejudices is that they view the members of outgroups as different from them. We may become concerned that our interactions with people from different racial groups will be unpleasant, and these anxieties may lead us to avoid interacting with people from those groups (Mallett, Wilson, & Gilbert, 2008). What this suggests is that a good way to reduce prejudice is to help people create closer connections with members of different groups. People will be more favorable toward others when they learn to see those other people as more similar to them, as closer to the self, and to be more concerned about them.

The idea that intergroup contact will reduce prejudice, known as the [contact hypothesis](#), is simple: If children from different ethnic groups play together in school, their attitudes toward each other should improve. And if we encourage college students to travel abroad, they will meet people from other cultures and become more positive toward them.

One important example of the use of intergroup contact to influence prejudice came about as a result of the important U.S. Supreme Court case *Brown v. Board of Education* in 1954. In this case, the Supreme Court agreed, based in large part on the testimony of psychologists, that busing Black children to schools attended primarily by White children, and vice versa, would produce positive outcomes on intergroup attitudes, not only because it would provide Black children with access to better schools, but also because the resulting intergroup contact would reduce prejudice between Black and White children. This strategy seemed particularly appropriate at the time it was implemented because most schools in the United States then were highly segregated by race.

The strategy of busing was initiated after the Supreme Court decision, and it had a profound effect on schools in the United States. For one, the policy was

very effective in changing school makeup—the number of segregated schools decreased dramatically during the 1960s after the policy was begun. Busing also improved the educational and occupational achievement of Blacks and increased the desire of Blacks to interact with Whites, for instance, by forming cross-race friendships (Stephan, 1999). Overall, then, the case of desegregating schools in the United States supports the expectation that intergroup contact, at least in the long run, can be successful in changing attitudes. Nevertheless, as a result of several subsequent U.S. Supreme Court decisions, the policy of desegregating schools via busing was not continued past the 1990s.

Although student busing to achieve desegregated schools represents one prominent example of intergroup contact, such contact occurs in many other areas as well. Taken together, there is substantial support for the effectiveness of intergroup contact in improving group attitudes in a wide variety of situations, including schools, work organizations, military forces, and public housing. Pettigrew and Tropp (2006) conducted a [meta-analysis](#) in which they reviewed over 500 studies that had investigated the effects of intergroup contact on group attitudes. They found that attitudes toward groups that were in contact became more positive over time. Furthermore, positive effects of contact were found on both stereotypes and prejudice and for many different types of contacted groups.

The positive effects of intergroup contact may be due in part to increases in [other-concern](#). Galinsky and Moskowitz (2000) found that leading students to take the perspective of another group member—which increased [empathy](#) and closeness to the person—also reduced prejudice. And the behavior of students on college campuses demonstrates the importance of connecting with others and the dangers of not doing so. Sidanius, Van Laar, Levin, and Sinclair (2004) found that students who joined exclusive campus groups, including fraternities, sororities, and minority ethnic organizations (such as the African Student Union), were more prejudiced to begin with and became even less connected and more intolerant of members of other social groups over the time that they remained in the organizations. It appears that memberships in these groups focused the students on themselves and other people who were very similar to

them, leading them to become less tolerant of others who are different.

Although intergroup contact does work, it is not a panacea because the conditions necessary for it to be successful are frequently not met. Contact can be expected to work only in situations that create the appropriate opportunities for change. For one, contact will only be effective if it provides information demonstrating that the existing stereotypes held by the individuals are incorrect. When we learn more about groups that we didn't know much about before, we learn more of the truth about them, leading us to be less biased in our beliefs. But if our interactions with the group members do not allow us to learn new beliefs, then contact cannot work.

When we first meet someone from another category, we are likely to rely almost exclusively on our stereotypes (Brodts & Ross, 1998). However, when we get to know the individual well (e.g., as a student in a classroom learns to know the other students over a school year), we may get to the point where we ignore that individual's group membership almost completely, responding to him or her entirely at the individual level (Madon et al., 1998). Thus contact is effective in part because it leads us to get past our perceptions of others as group members and to individuate them.

When we get past group memberships and focus more on the individuals in the groups, we begin to see that there is a great deal of variability among the group members and that our global and undifferentiating group stereotypes are actually not that informative (Rothbart & John, 1985). Successful intergroup contact tends to reduce the perception of outgroup homogeneity. Contact also helps us feel more positively about the members of the other group, and this positive affect makes us like them more.

Intergroup contact is also more successful when the people involved in the contact are motivated to learn about the others. One factor that increases this motivation is *interdependence*—a state in which the group members depend on each other for successful performance of the group goals (Neuberg & Fiske, 1987). The importance of interdependence can be seen in the success of

cooperative [learning](#) techniques, such as the [jigsaw classroom](#) (Aronson, Blaney, Stephan, Sikes, & Snapp, 1978; Aronson, 2004).

The jigsaw classroom is an approach *to learning in which students from different racial or ethnic groups work together, in an [interdependent](#) way, to master material*. The class is divided into small learning groups, where each group is diverse in ethnic and gender composition. The assigned material to be learned is divided into as many parts as there are students in the group, and members of different groups who are assigned the same task meet together to help develop a strong report. Each student then learns his or her own part of the material and presents this piece of the puzzle to the other members of his or her group. The students in each group are therefore interdependent in learning all the material. A wide variety of techniques, based on principles of the jigsaw classroom, are in use in many schools around the United States and the world, and research studying these approaches has found that cooperative, interdependent experiences among students from different social groups are effective in reducing negative stereotyping and prejudice (Stephan, 1999).

In sum, we can say that contact will be most effective when it is easier to get to know, and become more respectful of, the members of the other group and when the social norms of the situation promote equal, fair treatment of all groups. If the groups are treated unequally, for instance, by a teacher or leader who is prejudiced and who therefore treats the different groups differently, or if the groups are in competition rather than [cooperation](#), there will be no benefit. In cases when these conditions are not met, contact may not be effective and may in fact increase prejudice, particularly when it confirms stereotypical expectations (Stangor, Jonas, Stroebe, & Hewstone, 1996). Finally, it is important that enough time be allowed for the changes to take effect. In the case of busing in the United States, for instance, the positive effects of contact seemed to have been occurring, but they were not happening particularly fast.

Let's consider in the next section still another way that intergroup contact can reduce prejudice—the idea that prejudice can be reduced for people who have friends who are friends with members of the outgroup—the [extended-contact](#)

Research Focus: The Extended-Contact Hypothesis

Although the contact hypothesis proposes that direct contact between people from different social groups will produce more positive attitudes between them, recent evidence suggests that *prejudice can also be reduced for people who have friends who are friends with members of the outgroup*, even if the individual does not have direct contact with the outgroup members himself or herself. This hypothesis is known as the *extended-contact hypothesis*. Supporting this prediction, Wright, Aron, McLaughlin-Volpe, and Ropp (1997) found in two correlational studies that college students who reported that their own friends had friends who were from another ethnic group reported more positive attitudes toward that outgroup than did students who did not have any friends who had outgroup friends, even controlling for the participants' own outgroup friendships.

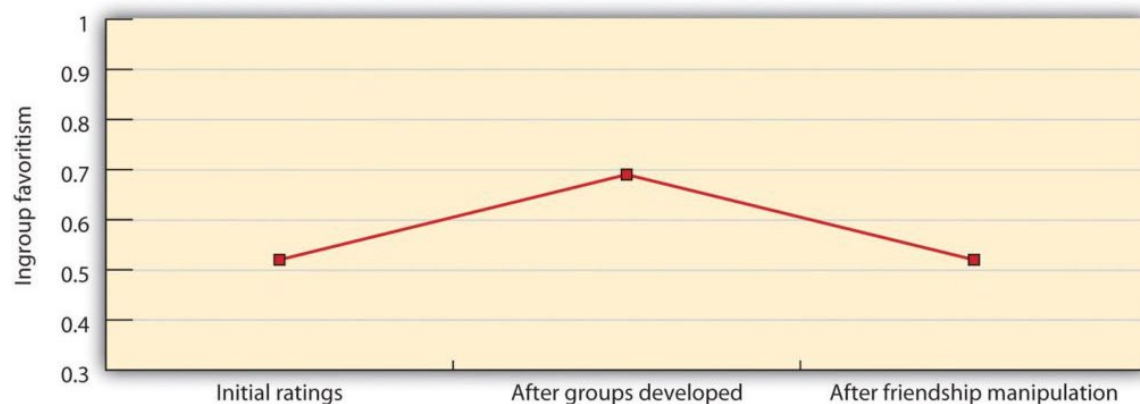
Wright et al. (1997) also tested the extended-contact hypothesis experimentally. Participants were four groups of 14 students, and each group spent a whole day in the lab. On arrival, 7 participants were assigned to the “green” group, and 7 to the “blue” group, supposedly on the basis of similar interests. To create strong ingroup identity and to produce competition between the groups, the group members wore blue and green t-shirts and engaged in a series of competitive tasks. Participants then expressed their initial thoughts and feelings about the outgroup and its members.

Then, supposedly as part of an entirely different study, one participant was randomly selected from each group, and the two were taken to a separate room in which they engaged in a

relationship-building task that has been shown to quickly create feelings of friendship between two strangers. Then the two members from each team were then reunited with their original groups, where they were encouraged to describe their experience with the other group member in the friendship-building task.

In the final phase, the groups then engaged in another competitive task, and participants rated their thoughts and feelings about the outgroup and its members again. As you can see in the following figure, and supporting the extended-contact hypothesis, results showed that the participants (including those who did not participate in the closeness task themselves) were more positive toward the outgroup after than before the two team members had met. This study, as well as many other studies, supports the importance of cross-group friendships in promoting favorable outgroup attitudes (Page-Gould, Mendoza-Denton, & Tropp, 2008; Shook & Fazio, 2008).

Figure 6.9 – The Extended-Contact Hypothesis



This figure shows how members of the two groups, which were in competition with each other, rated each other before and after the experimental manipulation of friendship. You can see that group relationships, which were becoming more negative, changed to being more positive after the intervention. Data are from Wright, Aron, McLaughlin-Volpe, and Ropp (1997).

Moving Others Closer to Us: The Benefits of Recategorization

The research on intergroup contact suggests that although contact may improve prejudice, it may make it worse if it is not implemented correctly. Improvement is likely only when the contact moves the members of the groups to feel that they are closer to each other rather than further away from each other. In short, groups are going to have better attitudes toward each other when they see themselves more similarly to each other—when they feel more like one large group than a set of smaller groups.

This fact was demonstrated in a very convincing way in one of the most well-known of all social psychological studies. In the “**Robbers’ Cave Study**,” **Sherif**, Harvey, White, Hood, and Sherif (1961) studied the group behavior of 11-year-old boys at a summer camp. Although the boys did not know it, the researchers carefully observed the behaviors of the children during the camp session, with the goal of learning about how group conflict developed and how it might be resolved among the children.

During the first week of the camp, the boys were divided into two groups that camped at two different campsites. During this time, friendly relationships developed among the boys within each of the two groups. Each group developed its own social norms and group structure and became quite cohesive, with a strong positive social identity. The two groups chose names for themselves (the Rattlers and the Eagles), and each made their own group flag and participated in separate camp activities.

At the end of this one-week baseline period, it was arranged that the two groups of boys would become aware of each other’s presence. Furthermore, the researchers worked to create conditions that led to increases in each group’s social identity and at the same time created negative perceptions of the other group. The researchers arranged baseball games, a tug-of-war, and a treasure hunt and offered prizes for the group that won the competitions. Almost

immediately, this competition fostered ingroup favoritism and prejudice, and discrimination quickly followed. By the end of the second week, the Eagles had sneaked up to the Rattlers' cabin and stolen their flag. When the Rattlers discovered the theft, they in turn raided the Eagles' cabin, stealing things. There were food fights in the dining room, which was now shared by the groups, and the researchers documented a substantial increase in name-calling and stereotypes of the outgroup. Some fistfights even erupted between members of the different groups.

The researchers then intervened by trying to move the groups closer to each other. They began this third stage of the research by setting up a series of situations in which the boys had to work together to solve a problem. These situations were designed to create interdependence by presenting the boys with ***superordinate goals***—goals that were both very important to them and yet that required the cooperative efforts and resources of both the Eagles and the Rattlers to attain. These goals involved such things as the need to pool money across both groups in order to rent a movie that all the campers wanted to view, or the need to pull together on ropes to get a food truck that had become stuck back onto the road. As the children worked together to meet these goals, the negative perceptions of the group members gradually improved; there was a reduction of hostility between the groups and an emergence of more positive intergroup attitudes.

This strategy was effective because it led the campers to perceive both the ingroup and the outgroup as one large group (“we”) rather than as two separate groups (“us” vs. “them”). As differentiation between the ingroup and the outgroup decreases, so should ingroup favoritism, prejudice, and conflict. The differences between the original groups are still present, but they are potentially counteracted by perceived similarities in the second superordinate group. *The attempt to reduce prejudice by creating a superordinate categorization* is known as the goal of creating a [common ingroup identity](#) (Gaertner & Dovidio, 2008), and we can diagram the relationship as follows:

interdependence and cooperation → common ingroup identity →

favorable intergroup attitudes.

A substantial amount of research has supported the predictions of the common ingroup identity model. For instance, Samuel Gaertner and his colleagues (Gaertner, Mann, Murrell, & Dovidio, 1989) tested the hypothesis that interdependent cooperation in groups reduces negative beliefs about outgroup members because it leads people to see the others as part of the ingroup (by creating a common identity). In this research, college students were brought to a laboratory where they were each assigned to one of two teams of three members each, and each team was given a chance to create its own unique group identity by working together. Then, the two teams were brought into a single room to work on a problem. In one condition, the two teams were told to work together as a larger, six-member team to solve the problem, whereas in the other condition, the two teams worked on the problem separately.

Consistent with the expected positive results of creating a common group identity, the interdependence created in the condition where the teams worked together increased the tendency of the team members to see themselves as members of a single, larger team, and this in turn reduced the tendency for each group to show ingroup favoritism.

But the benefits of recategorization are not confined to laboratory settings—they also appear in our everyday interactions with other people. Jason Neir and his colleagues (Neir et al., 2001) had Black and White interviewers approach White students who were attending a football game. The dependent measure was whether or not they agreed to help the interviewer by completing a questionnaire.

However, the interviewers also wore hats representing either one of the two universities who were playing in the game. As you can see in Figure 6.10 “Recategorization and Helping Behavior”, the data were analyzed both by whether the interviewer and the student were of the same race (either both White or one White and one Black) and also by whether they wore hats from the same or different universities. As expected on the basis of recategorization

and the common ingroup identity approach, the White students were significantly more likely to help the Black interviewers when they wore a hat of the same university as that worn by the interviewee. The hat evidently led the White students to recategorize the interviewer as part of the university ingroup, leading to more helping. However, whether the individuals shared university affiliation did not influence helping for the White participants, presumably because they already saw the interviewer as a member of the ingroup (the interviewer was also White).

Key Takeaways

- Changing our stereotypes and prejudices is not easy, and attempting to suppress them may backfire. However, with appropriate effort, we can reduce our tendency to rely on our stereotypes and prejudices.
- One approach to changing stereotypes and reducing prejudice is by changing social norms—for instance, through education emphasizing and laws enforcing equality and equity.
- Prejudice will change faster when it is confronted by people who see it occurring. Confronting prejudice may be embarrassing, but it also can make us feel that we have done the right thing.
- Intergroup attitudes will be improved when we can lead people to focus more on their connections with others. Intergroup contact, extended contact with others who share friends with outgroup members, and a common ingroup identity are all examples of this process.

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Chapter 7: Liking and Loving

7.0 Liking and Loving

7.1 Initial Attraction

7.2 Close Relationships: Liking and Loving

← 6.3 Reducing Discrimination

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7.0 Liking and Loving

Britain's Longest Married Couple Celebrate a Quiet 80th Anniversary

Frank and Anita Milford are in some ways your average couple: They met in 1926 at a YMCA dance, married in 1928, had two children, and lived together in the same a three-bedroom house their entire lives. But unlike many other couples, Frank and Anita's marriage lasted—in fact, it really lasted. In May of 2008, the pair equaled the record for being Britain's longest married couple—80 years of marriage.

To celebrate their 80th wedding anniversary, Frank (100 years old), and Anita (99 years old) spent a quiet weekend together—pretty typical of most of their days.

“At our age that's all you need,” said Mr. Milford. “Just us together, no big fuss.”

Frank and Anita indicated that one of the secrets to a successful marriage was to “share a little kiss and cuddle every night before bed. It's our golden rule.”

The Milfords believe that making time for one another is vital to keeping the relationship healthy. They claimed that respect and a process of “give and take” are great ways to sustain a relationship.



“We do everything together even after nearly 80 years.”

Like most couples who have been together for a number of years, there are still some cross words and everyday squabbles. Regardless, their relationship remains one that is loving and healthy.

Source: Miller, V. (2008, 24 May). Britain’s longest married couple celebrate a quiet 80th anniversary. The Telegraph. Retrieved from <http://www.telegraph.co.uk/news/uknews/2020233/Britains-longest-married-couple-celebrate-a-quiet-80th-anniversary.html>.

In prior chapters, we have considered the basic processes of [person perception](#). In doing so, we have focused primarily on our perceptions of people we do not know very well and with whom we do not have many social connections. But people also desire and need to develop [close relationships](#) with others, particularly those others who help us engage in reproduction and child rearing and who provide [social support](#)—the approval, assistance, advice, and comfort that we receive from those with whom we have developed stable positive relationships (Taylor, 2007).

[Close relationships](#) are relationships between people that are characterized by loving, caring, [commitment](#), and intimacy—such as those between adult friends, dating partners, lovers, and married couples (Clark & LeMay, 2010; Hendrick & Hendrick, 2000). These relationships are determined by biological, evolutionary, individual, and cultural factors. Successful close relationships involve the positive influence of cognitive variables, including perceptions of similarity with the other, interdependence, commitment, and the incorporation of other into the self-concept, as well as affective variables, including attachment, intimacy, and commitment. Our close relationships help us meet the goals of [self-concern](#) and [other-concern](#).

In this chapter, we will consider the benefits that come from our close relationships, the principles that lead people to become attracted to others, and

the variables that help create stable, healthy, and happy close relationships. In addition to being vitally important to us in an evolutionary sense (effective child rearing requires committed and effective parents), close relationships bring us health and happiness when we are able to create successful ones; they may produce a profound sense of loneliness and sadness when we are not.

People are well aware of the importance of having other people in their lives. When they are asked what makes them happy, people of all ages indicate that having friendships and good relationships with others is what they care about the most (Baumeister & Leary, 1995). And our self-esteem is in large part determined by how much we feel that we are accepted by others (Leary, 2005). Self-esteem rises when we feel accepted and valued by others and falls when we do not (Leary & Cox, 2008). People who do not feel that they are able to develop the types and quality of social relationships that they would prefer to have are lonely—a highly unpleasant and potentially unhealthy state (Cacioppo & Patrick, 2008).

Close relationships also keep us healthy. People who do not have adequate social support in the form of friends and family have more physical and mental health problems than do those with adequate social relationships (Cacioppo, Hawkley, & Bernston, 2003; Cacioppo et al., 2002).

In summary, our close relationships make us happy and healthy, and the lack of them leaves us lonely and hurting. We experience higher self-efficacy, self-esteem, and positive mood when we believe that our friends and partners are responding to us supportively and with a concern for our needs and our own welfare. Our relationships with others help us buffer the negative effects of stress, avoid unhealthy behaviors, and cope with serious physical illness. And our close relationships allow us to express our fundamental desires to reach out and respond to other people.

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7.1 Initial Attraction →

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7.1 Initial Attraction

Learning Objectives

1. [Summarize](#) the [variables](#) that lead to initial attraction between people.
2. [Outline](#) the variables that lead us to perceive someone as physically attractive, and explain why physical attractiveness is so important in liking.
3. Describe the ways that similarity and complementarity influence our liking for others.
4. Explain how [proximity](#) influences liking.

Physical Attractiveness

Although it may seem inappropriate or shallow to admit it, and although it is certainly not the only determinant of liking, people are **strongly influenced**, at least in **initial** encounters, by the **physical attractiveness** of [their](#) partners (Swami & Furnham, 2008). Elaine Walster and her colleagues (Walster, Aronson, Abrahams, & Rottman, 1966) arranged a field study in which college boys and girls were randomly paired with one another at a “computer dance.” After the partners had danced and talked for a couple of hours, [they](#) were interviewed separately about their own preferences and characteristics as well as about their perceptions of their date. Walster and her colleagues found that the only important determinant of participants’ liking for their date was his or her physical attractiveness. None of the other characteristics—even the perceived intelligence of the partner—mattered.

Perhaps this finding doesn't surprise you too much, given the importance of physical attractiveness in our [culture](#). Movies and TV shows feature attractive people, TV ads use attractive people to promote their products, and we spend millions of dollars each year to make ourselves look more attractive. Even infants who are only a year old prefer to look at faces that adults consider attractive rather than at unattractive faces (Langlois, Ritter, Roggman, & Vaughn 1991).

People who are attractive are also seen as having a variety of positive characteristics, and these traits are activated quickly and spontaneously when we see their faces (Olson & Marshuetz, 2005; van Leeuwen & Macrae, 2004). Attractive people are seen as more sociable, altruistic, and intelligent than their unattractive counterparts (Griffin & Langlois, 2006). Attractive people also have more choices of [sex](#) partners (Epstein, Klinkenberg, Scandell, Faulkner, & Claus, 2007), are more likely to be offered jobs (Dubois & Pansu, 2004), and may even live longer (Henderson & Anglin, 2003). This has sometimes been referred to as an attractiveness **halo effect**.

Similarity: We Like Those Who Are Like Us

Although it is a very important variable, finding someone physically attractive is of course only the first stage in developing a close relationship with another person. If we find someone attractive, we may want to pursue the relationship. And if we are lucky, that person will also find us attractive and be interested in the possibility of developing a closer relationship. At this point, we will begin to communicate, sharing our values, beliefs, and interests, and begin to determine whether we are compatible in a way that [leads](#) to increased liking.

Relationships are more likely to develop and be maintained to the extent that the partners **share values and beliefs**. [Research](#) has found that people tend to like and associate with others who share their age, education, race, [religion](#), level of intelligence, and socioeconomic status. It has even been found that taller people tend to like other tall people, that happy people tend to like other

happy people, and that people particularly enjoy others who have the same birthday and a similar sense of humor (Jones, Pelham, Carvallo, & Mirenberg, 2004; Pinel, Long, Landau, Alexander, & Pyszczynski, 2006). One classic study (Newcomb, 1961) arranged for male undergraduates, all strangers, to live together in a house while they were going to school. The men whose attitudes were similar during the first week ended up being friends, whereas those who did not initially share attitudes were significantly less likely to become friends.

Why Does Similarity Matter?

Similarity leads to attraction for a variety of reasons. For one, similarity makes things easier. You can imagine that if you only liked to go to action movies but your girlfriend or boyfriend only liked to go to foreign films, this would create difficulties in choosing an evening activity. Things would be even more problematic if the dissimilarity involved something even more important, such as your attitudes toward the relationship itself. Perhaps you want to have sex but your partner doesn't, or perhaps your partner wants to get married but you don't. These dissimilarities are going to create real problems. Romantic relationships in which the partners hold different religious and political orientations or different attitudes toward important issues such as premarital sex, marriage, and child rearing are of course not impossible—but they are more complicated and take more effort to maintain.

In addition to being easier, relationships with those who are similar to us are also reinforcing. Imagine you are going to a movie with your very best friend. The movie begins, and you realize that you are starting to like it a lot. At this point, you might look over at your friend and wonder how she is reacting to it. One of the great benefits of sharing beliefs and values with others is that those others tend to react the same way to events as you do. Wouldn't it be painful if every time you liked a movie, your best friend hated it, and every time she liked it, you hated it? But you probably don't need to worry too much about this, because your friend is probably your friend in good part because she likes the same things you like. Odds are that if you like the movie, your friend will too, and because she does, you can feel good about yourself and about your opinions

of what makes a good movie. Sharing our values with others and having others share their values with us help us validate the worthiness of our self-concepts. Finding similarities with another makes us feel good and makes us feel that the other person will reciprocate our liking for them (Singh, Yeo, Lin, & Tan, 2007).

Status Similarity

We all naturally want to have friends and form relationships with people who have high status. We prefer to be with people who are healthy, attractive, wealthy, fun, and friendly. But our ability to attract such high-status partners is limited by the principles of social exchange. It is no accident that attractive people are better able to get dates with other attractive people, or that men with more money can attract more attractive women. The basic principles of social exchange and equity dictate that there will be general similarity in status among people in [close relationships](#) because attractiveness is a resource that allows people to attract other people with resources (Kalick & Hamilton, 1986; Lee, Loewenstein, Ariely, Hong, & Young, 2008). You can do the test for yourself. Go to a movie or a concert, and watch the couples who are together. You'll find that the attractive people are together, as are the less attractive ones. It seems surprising to us when one partner appears much more attractive than the other, and we may well assume that the less attractive partner is offering some type of (perhaps less visible) social status in return.

There is still one other type of similarity that is important in determining whether a relationship will grow and continue, and it is also based on the principles of social exchange and equity. The finding is rather simple—we tend to prefer people who seem to like us about as much as we like them. Imagine, for instance, that you have met someone and you are hoping to pursue a relationship with them. You begin to give yourself to the relationship by opening up to the other person, telling him or her about yourself and making it clear that you would like to pursue a closer relationship. You make yourself available to spend time with the person and contact him or her regularly. You naturally expect the same type of behaviors in return, and if the partner does not return the openness and giving, the relationship is not going to go very far.

Relationships in which one person likes the other much more than the other likes him or her are inherently unstable because they are not balanced or equitable. An unfortunate example of such an imbalanced relationship occurs when one individual continually attempts to contact and pursue a relationship with another person who is not interested in one. It is difficult for the suitor to give up the pursuit because he or she feels passionately in love with the other, and his or her [self-esteem](#) will be hurt if the other person is rejecting. But the situation is even worse for the person who is being pursued because they feel both guilty about rejecting the suitor and angry that the suitor continues the pursuit (Baumeister & Wotman, 1992). Such situations are not uncommon and require that the individual who is being pursued make it completely clear that he or she is not interested in any further contact.

There is a clear moral to the importance of liking similarity, and it pays to remember it in everyday life. If we act toward others in a positive way, this expresses liking and respect for them, and the others will likely return the compliment. Being liked, praised, and even flattered by others is rewarding, and (unless it is too blatant and thus ingratiating) we can expect that others will enjoy it.

In sum, **similarity** is probably the most **important** single **determinant of liking**. Although we may sometimes prefer people who have different interests and skills from ours (Beach, Whitaker, Jones, & Tesser, 2001; Tiedens & Jimenez, 2003), when it comes to personality traits, it is similarity that matters—complementarity (being different from the other) just does not have much influence on liking.

Proximity

If I were to ask you who you might end up marrying (assuming you are not married already), I would guess that you'd respond with a list of the preferred personality traits or an [image](#) of your desired mate. You'd probably say something about being attractive, rich, creative, fun, caring, and so forth. And

there is no question that such individual characteristics matter. But social psychologists realize that there are other aspects that are perhaps even more important.

Consider this: You'll never marry someone that you never meet! Although that seems obvious, it's also really important. This means that you are likely to marry someone who's pretty similar to you because, unless you travel widely, most of the people you meet are going to share your cultural background and therefore have some of the values that you hold. In fact, the person you marry probably will live in the same city as you, attend the same college, take similar classes, and be pretty similar to you in most respects (Kubitschek & Hallinan, 1998).

Although meeting someone is an essential first step, simply being around another person also increases liking. People tend to become better acquainted with each other when the [social situation](#) brings them into repeated contact. This is the basic principle of **proximity liking**. For instance, [research](#) has found that students who sit next to each other in class are more likely to become friends, and this is true even when the seating is assigned by the instructor (Back, Schmukle, & Egloff, 2008). Festinger, Schachter, and Back (1950) studied friendship formation in people who had recently moved into a large housing complex. [They](#) found not only that people became friends with those who lived near them but that people who lived nearer the mailboxes and at the [foot](#) of the stairway in the building (where they were more likely to come into contact with others) were able to make more friends than those who lived at the ends of the corridors in the building and thus had fewer social encounters with others.

Key Takeaways

- Particularly in initial encounters, people are strongly influenced by the physical attractiveness of the other person.
- We tend to like people who share our values and beliefs, both because

similarity makes things easier and because similarity reinforces our own values and beliefs.

- [Proximity](#) is an important determinant of [interpersonal attraction](#).

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← 7.0 Liking and Loving

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7.2 Close Relationships: Liking and Loving

Learning Objectives

1. Outline the factors that define [close relationships](#).
2. Explain how people can best maintain their close relationships.

The basic principles of [social psychology](#) can also be applied to help us understand relationships that last longer. When good friendships develop, when people get married and plan to spend the rest of their lives together, and when families grow closer over time, the relationships take on new dimensions and must be understood in somewhat different ways. Yet the principles of social psychology can still be applied to help us understand what makes these relationships last. Although humans seem to be the only animals that are able to develop close relationships in which partners stay sexually faithful to each other for a lifetime (Barash & Lipton, 2002), these relationships do not come easily. About one half of contemporary marriages in the United States and Canada end in divorce (CDC, 2010).

The factors that keep people liking each other in long-term relationships are at least in part the same as the factors that lead to initial attraction. For instance, regardless of how long they have been together, people remain interested in the physical attractiveness of their partners, although it is relatively less important than for initial encounters. And similarity remains essential. Relationships are also more satisfactory and more likely to continue when the individuals develop and maintain similar interests and continue to share their important values and beliefs over time (Davis & Rusbult, 2001). Proximity also remains important—



relationships that undergo the strain of the partners' being apart from each other for very long are more at risk for breakup.

But what about passion? Does it still matter over time? Yes and no. People in long-term relationships who are most satisfied with their partners report that they still feel passion for their partners—they still want to be around them as much as possible, and they enjoy making love with them (Simpson, 1987; Sprecher, 2006). And partners report that the more they love their partners, the more attractive they find them (Simpson, Gangestad, & Lerma, 1990). On the other hand, the high levels of passionate love that are experienced in initial encounters are not likely to be maintained throughout the course of a long-term relationship (Acker & Davis, 1992). Over time, cognition becomes relatively more important than emotion, and close relationships are more likely to be based on [companionate love](#), defined as *love that is based on friendship, mutual attraction, common interests, mutual respect, and concern for each other's welfare*. This does not mean that enduring love is less strong—it just has a different underlying structure than initial love.

Closeness and Intimacy

When the partners in a relationship feel that they are close, and when they indicate that the relationship is based on caring, warmth, acceptance, and [social support](#), we can say that the relationship is intimate (Sternberg, 1986). Partners in intimate relationships are likely to think of the couple as “**we**” rather than as two separate individuals. People who have a sense of closeness with their partner are better able to maintain positive feelings about the relationship while at the same time being able to express negative feelings and to have accurate (although sometimes less than positive) judgments of the other (Neff & Karney, 2002). People may also use their close partner's positive characteristics to feel better about themselves (Lockwood, Dolderman, Sadler, & Gerchak, 2004).

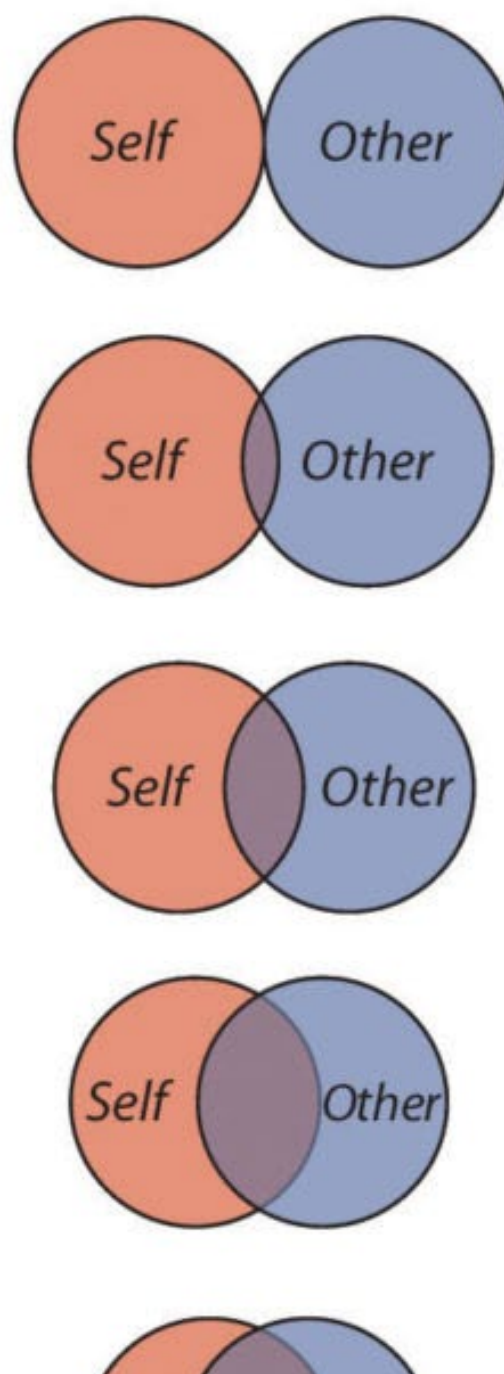
Arthur Aron and his colleagues (Aron, Aron, & Smollan, 1992) have assessed the role of closeness in relationships directly, using the simple measure shown

in Figure 7.6 “Measuring Relationship Closeness”. You might try completing the measure yourself for some different people that you know—for instance, your family members, your friends, your spouse, or your girlfriend or boyfriend. The measure is simple to use and to interpret. If a person chooses a circle that represents the self and the other as more overlapping, this means that the relationship is close. But if they choose a circle that is less overlapping, then the relationship is less so.

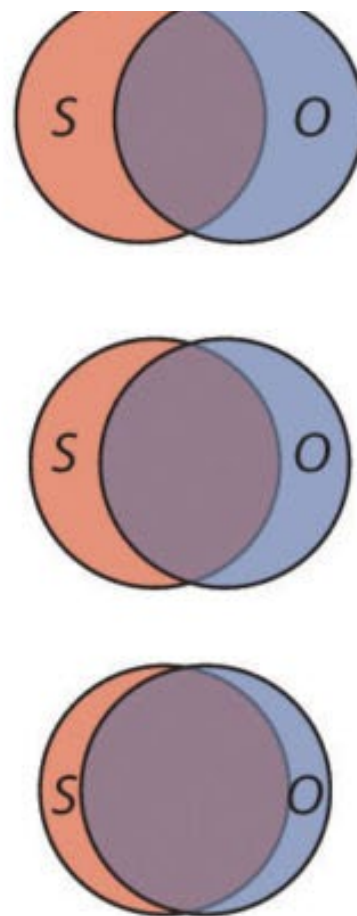
Although the closeness measure is simple, it has been found to be highly predictive of people’s satisfaction with their close relationships and of the tendency for couples to stay together. In fact, the perceived closeness between romantic partners can be a better predictor of how long a relationship will last than is the number of positive feelings that the partners indicate having for each other. In successful close relationships cognitive representations of the self and the other tend to merge together into one, and it is this tie—based on acceptance, caring, and social support—that is so important (Aron, Aron, Tudor, & Nelson, 1991).

Aron and his colleagues (Aron, Melinat, Aron, & Vallone, 1997) used an experimental design to test whether self-disclosure of intimate thoughts to others would increase closeness. In a laboratory, they paired college students with another student, one

Figure 7.6 – Measuring Relationship Closeness



whom they did not know. Some of the students were asked to share some intimate thoughts with each other by asking and answering questions such as “When did you last cry in front of another person?” In comparison with control participants who only engaged in small talk with their partners (answering questions such as “What is your favorite holiday?”), the students who disclosed more intimate experiences reported feeling significantly closer to each other at the end of the conversation.



This measure is used to determine how close two partners feel to each other. The respondent simply circles which of the figures he or she feels characterizes the relationship. From Aron, Aron, and Smollan (1992).

Communal and Exchange Relationships

In intimate close relationships, the partners can become highly attuned to each other’s needs, such that the desires and goals of the other become as important as, or more important than, one’s own needs. When people are attentive to the needs of others—for instance, parents’ attentiveness to the needs of their children or the attentiveness of partners in a romantic relationship—and when they help the other person meet his or her needs without explicitly keeping track of what they are giving or expecting to get in return, we say that the partners have a communal relationship. [Communal relationships](#) are close

relationships in which partners suspend their need for equity and exchange, giving support to the partner in order to meet his or her needs, and without consideration of the costs to themselves. Communal relationships are contrasted with [exchange relationships](#), relationships in which each of the partners keeps track of his or her contributions to the partnership.

Suggesting that [communal relationships](#) can be beneficial, research has found that happier couples are less likely to “keep score” of their respective contributions (Buunk, Van Yperen, Taylor, & Collins, 1991). And when people are reminded of the external benefits that their partners provide them, they may experience decreased feelings of love for them (Seligman, Fazio, & Zanna, 1980).

Although partners in long-term relationships are frequently willing and ready to help each other meet their needs, and although they will in some cases forgo the need for exchange and reciprocity, this does not mean that they always or continually give to the relationship without expecting anything in return. Partners do keep track of their contributions and received benefits. If one or both of the partners feel that they are unfairly contributing more than their fair share, and if this inequity continues over a period of time, the relationship will suffer. Partners who feel that they are contributing more will naturally become upset because they will feel that they are being taken advantage of. But the partners who feel that they are receiving more than they deserve might feel guilty about their lack of contribution to the partnership.

Members of long-term relationships focus to a large extent on maintaining equity, and marriages are happiest when both members perceive that they contribute relatively equally (Van Yperen & Buunk, 1990). People stay in relationships longer when they feel that they are being rewarded by them (Margolin & Wampold, 1981). In short, in relationships that last, the partners are aware of the needs of the other person and attempt to meet them equitably. But partners in the best relationships are also able to look beyond the rewards themselves and to think of the relationship in a communal way.

Interdependence and Commitment

Another factor that makes long-term relationships different from short-term ones is that they are more complex. When a couple begins to take care of a household together, has children, and perhaps has to care for elderly parents, the requirements of the relationship become correspondingly bigger. As a result of this complexity, the partners in close relationships increasingly turn to each other not only for social support but also for help in coordinating activities, remembering dates and appointments, and accomplishing tasks (Wegner, Erber, & Raymond, 1991). The members of a **close relationship** are **highly interdependent**, *relying to a great degree on each other to meet their goals*.

It takes a long time for partners in a relationship to develop the ability to understand the other person's needs and to form positive patterns of interdependence in which each person's needs are adequately met. The social representation of a significant other is a rich, complex, and detailed one because we know and care so much about him or her and because we have spent so much time in his or her company (Andersen & Cole, 1990). Because a lot of energy has been invested in creating the relationship, particularly when the relationship includes children, breaking off the partnership becomes more and more costly with time. After spending a long time with one person, it may also become more and more difficult to imagine ourselves with anyone else.

In relationships in which a positive rapport between the partners is developed and maintained over a period of time, the partners are naturally happy with the relationship and they become committed to it. **Commitment** refers to *the feelings and actions that keep partners working together to maintain the relationship*. In comparison to those who are less committed, partners who are more committed to the relationship see their mates as more attractive than others, are less able to imagine themselves with another partner, express less interest in other potential mates, are less aggressive toward each other, and are less likely to break up (Simpson, 1987; Slotter et al., 2011).

Commitment may in some cases lead individuals to stay in relationships that they could leave, even though the costs of remaining in the relationship are very high. On the surface, this seems puzzling because people are expected to attempt to maximize their rewards in relationships and would be expected to leave them if they are not rewarding. But in addition to evaluating the outcomes that one gains from a given relationship, the individual also evaluates the potential costs of moving to another relationship or not having any relationship at all. We might stay in a romantic relationship, even if the benefits of that relationship are not high, because the costs of being in no relationship at all are perceived as even higher. In short, when considering whether to stay or leave, we must consider both the costs and benefits of the current relationship and the costs and benefits of the alternatives to it (Rusbult, Olsen, Davis, & Hannon, 2001).

Although the good news about interdependence and [commitment](#) is clear—they help relationships last longer—they also have a potential downside. Breaking up, should it happen, is more difficult in relationships that are interdependent and committed. The closer and more committed a relationship has been, the more devastating a breakup will be.

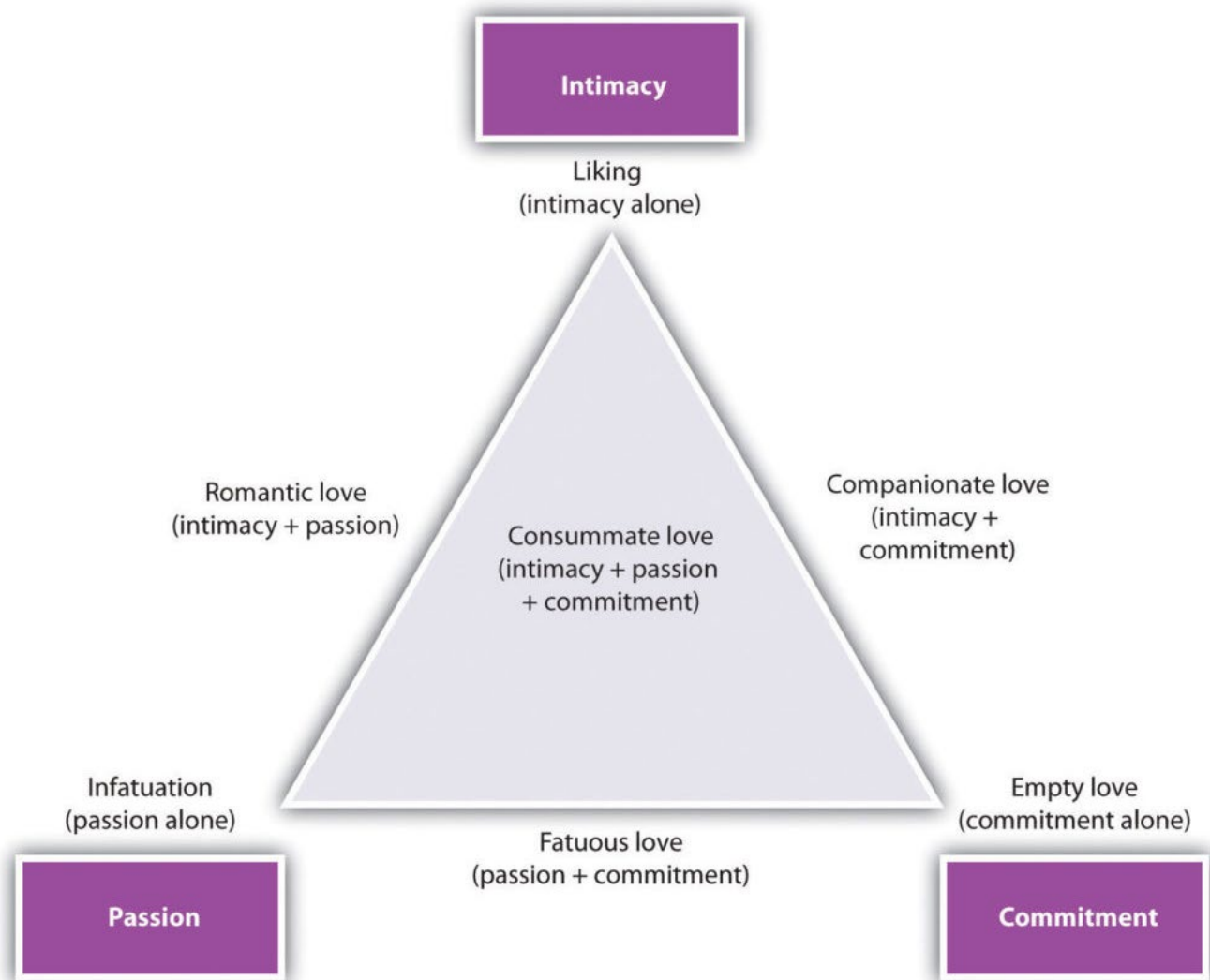
What Is Love?

Although we have talked about it indirectly, we have not yet tried to define love itself—and yet it is obviously the case that close relationships are all about love. Social psychologists have studied the function and characteristics of romantic love, finding that it has cognitive, affective, and behavioral components and that it occurs cross-culturally. Romantic love is found in all cultures, although how it is experienced may vary.

Robert Sternberg and others (Arriaga & Agnew, 2001; Sternberg, 1986) have proposed a [triangular model of love](#), *an approach that suggests that there are different types of love and that each is made up of different combinations of cognitive and affective variables, specified in terms of passion, intimacy, and commitment*. The model, shown in Figure 7.7 “[Triangular Model of Love](#)”,

suggests that only *consummate love* has all three of the components (and is probably experienced only in the very best romantic relationships), whereas the other types of love are made up of only one or two of the three components. For instance, people who are good friends may have liking (**intimacy**) only or may have known each other so long that they also share commitment to each other (**companionate love**). Similarly, partners who are initially dating might simply be infatuated with each other (passion only) or may be experiencing **romantic love** (both passion and liking but not commitment).

Figure 7.7 – Triangular Model of Love proposed by Robert Sternberg.



Research Focus: Romantic Love

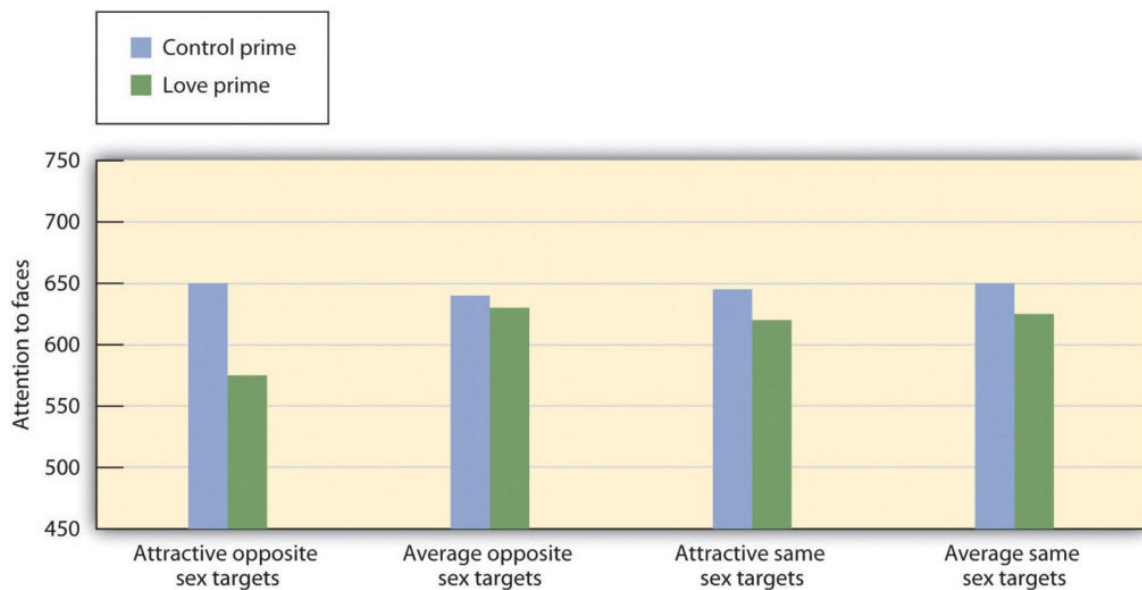
Reduces Our Attention to Attractive Others

Evolutionary psychologists have proposed that we experience romantic love to help increase our evolutionary [fitness](#) (Taylor & Gonzaga, 2006). According to this idea, love helps couples work together to improve the relationship by coordinating and planning activities and by increasing commitment to the partnership. If love acts as a “commitment device,” it may do so in part by helping people avoid being attracted to other people who may pose a threat to the stability of the relationship (Gonzaga, Haselton, Smurda, Davies, & Poore, 2008; Sabini & Silver, 2005).

Jon Maner and his colleagues (Maner, Rouby, & Gonzaga, 2008) tested this idea by selecting a sample of participants who were currently in a committed relationship and manipulating the extent to which the participants were currently experiencing romantic love for their partners. They predicted that the romantic love manipulation would decrease attention to faces of attractive opposite-sex people.

One half of the participants (the *romantic love condition*) were assigned to write a brief essay about a time in which they experienced strong feelings of love for their current partner. Participants assigned to the *control condition* wrote a brief essay about a time in which they felt extremely happy. After completing the essay, participants completed a procedure in which they were shown a series of attractive and unattractive male and female faces. The procedure assessed how quickly the participants could shift their attention away from the photo they were looking at to a different photo. The [dependent variable](#) was the reaction time (in milliseconds) with which participants could shift their attention.

Figure 7.8 – Romantic Love and Attention to Faces



Activating thoughts and feelings of romantic love reduced attention to faces of attractive alternatives. Attention to other social targets remained unaffected. Data are from Maner et al. (2008).

As you can see in the preceding figure, the participants who had been asked to think about their thoughts and feelings of love for their partner were faster at moving their attention from the attractive opposite-sex photos than were participants in any of the other conditions. When experiencing feelings of romantic love, participants' attention seemed repelled, rather than captured, by highly attractive members of the opposite sex. These findings suggest that romantic love may inhibit the perceptual processing of physical attractiveness cues—the very same cues that often pose a high degree of threat to the relationship.

Individual Differences in Loving: Attachment Styles

One of the **important** determinants of the quality of **close relationships** is the way that the partners relate to each other. These approaches can be described in terms of [attachment style](#)—*individual differences in how people relate to others in close relationships*. We display our attachment styles when

we interact with our parents, our friends, and our romantic partners (Eastwick & Finkel, 2008).

Attachment styles are learned in childhood, as children develop either a healthy or an unhealthy attachment style with their parents (Ainsworth, Blehar, Waters, & Wall, 1978; Cassidy & Shaver, 1999). Most children develop healthy or ***secure attachment styles***. These children perceive their parents as safe, available, and responsive caregivers and are able to relate easily to them. For these children, the parents successfully create appropriate feelings of affiliation and provide a secure base from which the child feels free to explore and then to return to. However, for children with unhealthy attachment styles, the family does not provide these needs. Some children develop an ***anxious/ambivalent attachment style***, becoming overly dependent upon the parents and continually seeking more affection from them than they can give. These children are anxious about whether the parents will reciprocate closeness. Still other children become unable to relate to the parents at all, becoming distant, fearful, and cold (the ***avoidant attachment style***).

The attachment styles that we develop in childhood remain to a large extent stable into adulthood (Caspi, 2000; Collins, Cooper, Albino, & Allard, 2002; Rholes, Simpson, Tran, Martin, & Friedman, 2007). **Fraley (2002)** conducted a [meta-analysis](#) of 27 studies that had looked at the relationship between attachment behavior in infants and in adults over 17 years of age and found a significant correlation between the two measures.

The consistency of attachment styles over the life span means that **children** who develop **secure attachments** with their parents as infants are better able to create **stable, healthy interpersonal relationships** with other individuals, including romantic partners, as **adults** (Hazan & Diamond, 2000). They stay in relationships longer and are less likely to feel jealousy about their partners. But the relationships of anxious and avoidant partners are more problematic. Anxious men and women tend to be less warm with their partners, are more likely to get angry at them, and have more difficulty expressing their feelings (Collins & Feeney, 2000). Anxious types also tend to worry about their

partner's love and commitment for them, and they interpret their partner's behaviors more negatively (Collins & Feeney, 2004; Pierce & Lydon, 2001).

Anxious partners also see **more conflict** in their **relationships** and experience the conflicts more negatively (Campbell, Simpson, Boldry, & Kashy, 2005).

On the other hand, people with **avoidant personality** types simply have **trouble creating close relationships** at all (Gabriel, Carvallo, Dean, Tippin, & Renaud, 2005). They have difficulty expressing emotions, and experience more negative affect in their interactions (Tidwell, Reis, & Shaver, 1996). They also have trouble understanding other's emotions (Fraley, Garner, & Shaver, 2000) and show a relative lack of interest in [learning](#) about their romantic partner's thoughts and feelings (Rholes, Simpson, Tran, Martin, & Friedman, 2007).

One way to think about attachment styles, shown in Table 7.1 “Attachment as [Self-Concern](#) and [Other-Concern](#)”, is in terms of the extent to which the individual is able to successfully meet the important goals of [self-concern](#) and [other-concern](#) in his or her close relationships. People with a secure attachment style have positive feelings about themselves and also about others. People with anxious/ambivalent attachment styles feel good about themselves (the goal of self-concern is being met), but they do not have particularly good relations with others. People with avoidant attachment styles are primarily other-concerned. They want desperately to be liked, but they do not have a very positive opinion of themselves; this lack of self-esteem hurts their ability to form good relationships. The fourth cell in the table, lower right, represents people who are not meeting goals of either self-concern or other-concern. We can call this attachment style *fearful-avoidant*.

This way of thinking about attachment shows, again, the importance of both self-concern and other-concern in successful social interaction. People who cannot connect with others do not make good partners. But people who do not feel good about themselves also are not good partners—self-concern goals must be met before we can successfully meet the goals of other-concern.

TABLE 7.1 ATTACHMENT AS SELF-CONCERN AND OTHER-CONCERN

Self-concern	Other-concern	
	Goals are met	Goals are not met
Goals are met	<i>Secure attachment</i> (Healthy feelings about the self and about important others)	<i>Avoidant attachment</i> (Healthy feelings about the self but fears about connecting with others)
Goals are not met	<i>Anxious/ambivalent attachment</i> (Desires to reach out to others but also anxious about the self)	<i>Fearful attachment</i> (Relationships with others are poor but so is the self-concept)

Because attachment styles have such an important influence on relationships, you should think carefully about your potential partner’s interactions with the other people in his or her life. The quality of the **relationships** that people have with their **parents** and **close friends** will **predict** the **quality** of their **romantic relationships**. But although they are very important, attachment styles do not predict everything. People have many experiences as adults, and these interactions can influence, both positively and negatively, their ability to develop close relationships (Baldwin & Fehr, 1995; Scharfe & Bartholomew, 1994).

Making Relationships Last

Now that you have a better idea of the variables that lead to [interpersonal attraction](#) and that are important in close relationships, you should be getting a pretty good idea of the things that partners need to do to help them stay together. It is true that many marriages end in divorce, and this number is higher in individualistic cultures, where the focus is on the individual, than it is in collectivistic cultures, where the focus is on maintaining group togetherness. But even in the West, the number of divorces is falling, at least for the most

educated segments of U.S. society (Marriage Project, 2011).

In part, the ideas of Britain's long-married couple Frank and Anita Milford about what made their relationship so successful are probably correct. Let's look at some of the things that they seem to have done and compare them with what we might expect on the basis of social psychological research.

- **Be prepared for squabbles.** Every relationship has conflict. This is not unexpected or always bad. Working through minor conflicts can help you and your partner improve your social skills and make the relationship stronger (Pickett & Gardner, 2005).
- **Don't be negative.** Negative cognitions and emotions have an extremely harmful influence on relationships (Gottman, 1994). Don't let a spiral of negative thinking and negative behaviors get started. Do whatever you can to think positively.
- **Be fair in how you evaluate behaviors.** People in close relationships, as do most people in their everyday lives, tend to inflate their own self-worth. They rate their own positive behaviors as better than their partner's, and rate their partner's negative behaviors as worse than their own. Try to give your partner the benefit of the doubt—remember that you are not perfect either.
- **Don't do something dumb.** Relationships break up when one or both of the partners betray the relationship. Of course sexual infidelities create a major strain, but women are also concerned about emotional infidelity in their partners. (Men: Stop flirting; it will make your partner jealous!) Marriages are happier when the partners focus on each other and not on other potential mates (Maner et al., 2009).
- **Do things that please your partner.** The principles of social exchange make it clear that being nice to others leads them to be nice in return.
- **Have fun.** Relationships in which the partners have positive moods and in which the partners are not bored tend to last longer (Tsapelas, Aron, & Orbach, 2009).
- **Stop fighting.** Conflict in relationships leads to divorce (Birditt, Brown, Orbach, & McIlvane, 2010). Learn to talk with your partner in positive,

rather than negative, ways.

Partners who are able to remain similar in their values and other beliefs are going to be more successful. This seems to have been the case for Frank and Anita—they continued to share activities and interests. Partners must also display positive affect toward each other. Happy couples are in positive moods when they are around each other—they laugh together, and they express approval rather than criticism of each other’s behaviors. Partners are happier when they view the other person in a positive or even “idealized” sense rather than in a more realistic and perhaps more negative one (Murray, Holmes, & Griffin, 1996). Anita and Frank talked in their interview about how their time together was characterized by positive feelings and romance, and perhaps that helped them stay together.

Next, the partners must share, in the sense that they are willing to express their thoughts about each other. Successful relationships involve self-disclosure of one’s own needs and desires, which allows the partner to become aware of the needs of the other and attempt to meet them if possible. If the partners are not able to express their concerns, then the relationship cannot become more intimate. **Successful relationships have successful communication patterns.**

Finally, but not least important, are social behaviors. Many people think (based in part on what they see on TV and read about) that extramarital affairs are a common part of close relationships. But research suggests that this is not the case. A survey by the Chicago Social Health and Life Survey (Chicago Health and Social Life Survey, 2011) found not only that 87% of married partners believe that extramarital sex is wrong but that the partners also seemed to act in accordance with these values. In answering the survey, 75% of the men and 90% of the women claimed to have been completely faithful to their partner over their entire marriage. And extramarital affairs, when they do occur, are likely to be one-time events.

These data confirm that partners must refrain from engaging in behaviors that

are harmful to the relationship, such as cheating on a partner, because these are naturally disruptive to a happy relationship. Partners do not expect or tolerate cheating. “Open marriages” do not work; **infidelity in relationships is strongly associated with divorce** (Wiederman, 1997).

Even if a person does not actually cheat by having sex with someone else, his or her partner may still be jealous, and jealousy can harm relationships. Jealousy is a powerful emotion that has been evolutionarily selected to help maintain close relationships. Both men and women experience jealousy, although they experience it to different extents and in different ways. **Men are more jealous** than women overall. And men are more concerned than women about **sexual infidelities** of their partners, whereas women are relatively more concerned about **emotional infidelities** of their partners (Buss, Larsen, Westen, & Semmelroth, 1992). Men’s concern with sexual cheating is probably due in large part to evolutionary factors related to [kin selection](#): Men need to be particularly sure that their partners are sexually faithful to them to ensure that the time they spend raising children is spent on raising their own children, not those of others. And women’s concern with emotional fidelity fits with a focus on maintaining the relationship intact. Flirting suggests that the man is not really committed to the relationship and may leave it.

When Relationships End

Inevitably, some relationships do break up, and these separations may cause substantial pain. When the partners have been together for a long time, particularly in a relationship characterized by interdependence and commitment, the pain is even greater (Simpson, 1987). The pain of a breakup is in part due to the loneliness that results from it. People who lose someone they care about also lose a substantial amount of social support, and it takes time to recover and develop new social connections. **Lonely people** sleep more poorly, take longer to recover from stress, and show poorer health overall (Cacioppo et al., 2002).

The pain of a loss may be magnified when people feel that they have been

rejected by the other. The experience of **rejection** makes people sad, angry, more likely to break [social norms](#), and more focused on self-concern. The ability to effectively self-regulate is lowered, and people are more likely to **act on their impulses** (Baumeister, DeWall, Ciarocco, & Twenge, 2005). But people who have been rejected are also more motivated by other-concern; they are particularly likely to try to make new friends to help make up for the rejection (Gardner, Pickett, & Brewer, 2000). Although people who have been rejected are particularly hurt, people who have rejected others may feel guilty about it.

Breaking up is painful, but people do recover from it, and they usually move on to find new relationships. Margaret Stroebe and her colleagues (Stroebe, Hansson, Schut, & Stroebe, 2008) found that people adjusted to the loss of a partner, even one with whom they had been together for a long time, although many did have increased psychological difficulties, at least in the short term.

Key Takeaways

- The factors that keep people liking each other in long-term relationships are at least in part the same as the factors that lead to initial attraction.
- Over time, cognition becomes relatively more important than passion, and close relationships are more likely to be based on **companionate love** than on **passionate love**.
- In successful relationships, the partners begin to feel close to each other and become attuned to each other's needs.
- Partners in close relationships become **interdependent** and develop a **commitment** to the relationship.
- **Attachment styles**, formed in infancy, **predict** how people relate to others in close **relationships** as adults.

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Chapter 8: Helping and Altruism

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8.0 Helping and Altruism

Brad Pitt Helping in New Orleans



[Wikimedia Commons](#) – public domain.

The film actor Brad Pitt has been personally involved in helping rebuild the city of New Orleans after it was devastated by Hurricane Katrina in 2005. As one who has always been interested in architecture, Pitt created a rebuilding project and donated \$5 million of his own money to get it started. With the help of some architectural firms, he produced a wide variety of ecologically friendly homes and flood-proof designs. The website

(<http://www.makeitrightnola.org>) asks businesses, religious groups, and individuals to provide grants and donations for house projects.

Pitt says the primary goal of his work is to replace homes, although many officials and politicians wonder whether it is a good idea to rebuild these houses in area that is likely to be flooded again.

To publicize his cause, Pitt had 150 huge pink Monopoly-shaped houses



built around the Lower Ninth Ward. The pink blocks, which he described as a work of art, emphasize the needs of the ward and his ideas for redesign.

Pitt said at the time that rebuilding the Lower Ninth Ward was a bigger priority than his movie career, a project he was going to see through to the end.

Source: <http://www.guardian.co.uk/world/2007/dec/04/film.usa>.

Hurricane Katrina hit the southern coast of the United States in the fall of 2005. The hurricane created billions of dollars in damage, destroyed a good part of the city of New Orleans and other Southern towns, and caused the dislocation of thousands of people from their homes. The hurricane made news across the world, and the disaster was not ignored. Hundreds of thousands of people made financial contributions to help rebuild the cities and repair the lives that were devastated by the storm. During the first few months after the storm, thousands more people came from across the country, and even from around the world, to help clean up the mess and repair the damage that the storm had caused. Many of these volunteers had been to New Orleans, and some had families and friends there. Others came simply because they had heard about the disaster and wanted to help the people who were so profoundly affected by it.

When you hear about this type of behavior, you may wonder about its meaning for human nature. Why would people sacrifice so much of themselves for others who cannot help them in return? Is helping part of the normal human experience, or are these acts unusual, unexpected, and rare? Who is most likely to help, who are we most likely to help, and under what social circumstances do we help or not help? And what biological, personal, social, and cultural factors influence helping?

On the other hand, perhaps you are skeptical about [altruism](#). You may have noticed the many cases in which people seem oblivious to the needs of others.

We allow tens of millions of people in our country to live in poverty, we do little to help fellow citizens who do not receive adequate health care, and often we seem to be more concerned with ourselves than we are with others. You might wonder whether people ever perform behaviors that are not designed—at least in some way—to benefit themselves. Perhaps at least some of the Katrina volunteers, and even Brad Pitt himself, were really helping—at least in part—for themselves. The money and time that they volunteered might have been motivated by the desire to avoid being seen as selfish, or by the fear of feeling guilty if they did not help. Perhaps our seemingly altruistic behaviors are actually motivated not by the desire to increase another's welfare but by the desire to enhance the self.

Human nature has created a general tendency for people to enjoy the company of others and to trust, care for, and respect other people. This idea leads us to expect that we will, in most cases, be helpful and cooperative, and perhaps even altruistic. There is evidence to support this idea. According to a survey given by an established coalition that studies and encourages volunteering (<http://www.independentsector.org>), in the year 2001 over 83 million American adults reported that they helped others by volunteering and did so an average of 3.6 hours per week. The survey estimated that the value of the volunteer time that was given was over 239 billion dollars. It seems that many people are helpful to others. Indeed, although few of us are likely to have the opportunity to engage in an act of helpful heroism, we are all likely to have the opportunity to help somebody sometime, and it is likely that—if the costs are not too great—we will do so.

These decisions are influenced by the underlying human motivations of protecting the self and reaching out to others. Some of our altruistic behavior is part of our genetic endowment—we help because we are human beings, and human beings (as are many other species) are helpful. In other cases our helping is more selfish, designed to make ourselves feel better or even to gain rewards such as praise, status, or money.

Because we spend so much time in the presence of others, we have the opportunity to react to them in either positive or negative ways. To some people

we are friendly, caring, and helpful; to others we are wary, unfriendly, or even mean and aggressive. The goal of this chapter on “Helping and [Altruism](#)” and the chapter on “[Aggression](#)” is to understand when and why people engage in either prosocial or antisocial behaviors. Let’s begin by focusing on the positive side of the equation—what makes us help others. The next chapter on “Aggression” will discuss the flip side—the causes of human [aggression](#).

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8.1 Understanding Altruism: ...→

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8.1 Understanding Altruism: Self and Other Concerns

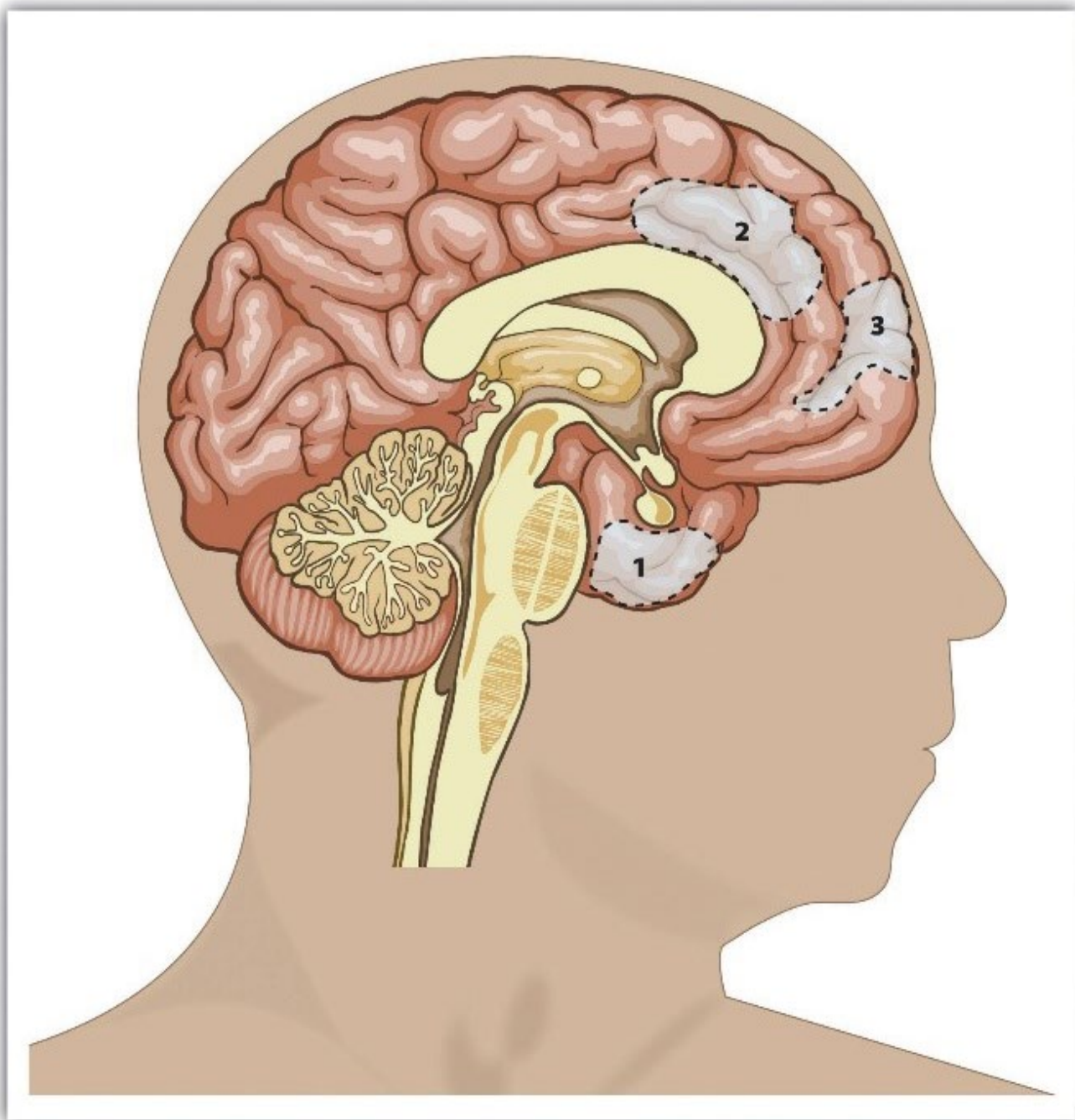
Learning Objectives

1. Understand the differences between altruism and helping and explain how social psychologists try to differentiate the two.
2. Review the roles of reciprocity and social exchange in helping.
3. Describe the evolutionary factors that influence helping.
4. Summarize how the perceptions of rewards and costs influence helping.
5. Outline the social norms that influence helping.

[Altruism](#) refers to *any behavior that is designed to increase another person's welfare, and particularly those actions that do not seem to provide a direct reward to the person who performs them* (Batson, 2011; Dovidio, Piliavin, Schroeder, & Penner, 2006; Penner, Dovidio, Piliavin, & Schroeder, 2005). Altruism occurs when we go out of our way to help people who have lost their homes as a result of a natural disaster such as a hurricane, when we stop to help a stranger who has been stranded on the highway, when we volunteer at a homeless shelter or donate to a charity, or when we get involved to prevent a crime from occurring. Every day there are numerous acts of helping that occur all around us. As we will see, some of these represent true [altruism](#), whereas other represent helping that is motivated more by [self-concern](#). And of course, there are also times when we do not help at all, seeming to not care about the needs of others.



Figure 8.1



This figure shows the areas of the human brain that are known to be important in empathy and helping. They include the amygdala (area 1) and sections of the prefrontal cortex (areas 2 and 3). From Lieberman (2010).

Helping is strongly influenced by affective variables. Indeed, the parts of the brain that are most involved in empathy, altruism, and helping are the amygdala and the prefrontal cortex, areas that are responsible for emotion and emotion regulation.

Kinship

Is the tendency to help others, at least in part, a basic feature of human nature? Evolutionary psychologists believe so. They argue that although helping others can be costly to us as individuals, altruism does have a clear benefit for the group as a whole. Remember that in an evolutionary sense the survival of the individual is less important than the survival of the individual's genes (McAndrew, 2002). Therefore, if a given behavior such as altruism enhances our reproductive success by helping the species as a whole survive and prosper, then that behavior is likely to increase fitness, be passed on to subsequent generations, and become part of human nature.

If we are altruistic in part to help us pass on our genes, then we should be particularly likely try to care for and to help our relatives. Research has found that we are indeed particularly helpful to our kin (Madsen et al., 2007; Stewart-Williams, 2007). Burnstein, Crandall, and Kitayama (1994) asked students in the United States and Japan to report how they would respond to a variety of situations in which someone needed help. The students indicated that in cases in which a person's life was at stake and the helping involved a lot of effort, time, and danger, they would be more likely to help a person who was closely related to them (for instance, a sibling, parent, or child) than they would be to help a person who was more distantly related (for example, a niece, nephew, uncle, or grandmother). People are more likely to donate kidneys to relatives than to strangers (Borgida, Conner, & Manteufel, 1992), and even children indicate that they are more likely to help their siblings than they are to help a friend (Tisak & Tisak, 1996).

Our reactions to others are influenced not only by our genetic relationship to them but also by their perceived similarity to us. We help friends more than we help strangers, we help members of our ingroups more than we help members of outgroups, and we help people who are more similar to us more generally (Dovidio et al., 1997; Krupp, DeBruine, & Barclay, 2008; Sturmer, Snyder, Kropp, & Siem, 2006). It is quite possible that similarity is an important determinant of helping because we use it as a marker—although not a perfect

one—that people share genes with us (Park & Schaller, 2005; Van Vugt & Van Lange, 2006). Cialdini, Brown, Lewis, Luce, and Neuberg (1997) have proposed that it is the sense of perceived similarity—the sense of “oneness” between the helper and the individual in need—that motivates most helping.

Reciprocity and Social Exchange

Although it seems logical that we would help people we are related to or those we perceive as similar to us, why would we ever help people to whom we are not related? One explanation for such behavior is based on the principle of [reciprocal altruism](#) (Trivers, 1971). *[Reciprocal altruism](#) is the idea that, if we help other people now, they will return the favor should we need their help in the future.* By helping others, we both increase our chances of survival and reproductive success and help others increase their chances of survival too. Over the course of evolution, those who engage in reciprocal altruism should be able to reproduce more often than those who do not, thus enabling this kind of altruism to continue. Reciprocal altruism means that people even may help total strangers, based on the assumption that doing so is useful because it may lead others to help them in the future.

One fact that might help convince you that altruism is in fact evolutionarily adaptive is that many animals also engage in reciprocal altruism. Birds emit an alarm to nearby birds to warn them of a predator even at a potential cost to themselves. Dolphins may support sick or injured animals by swimming under them and pushing them to the surface so they can breathe. Male baboons threaten predators and guard the rear of the troop as it retreats. And even bats have a buddy system in which a bat that has had a successful night of feeding will regurgitate food for its less fortunate companion (Wilkinson, 1990).

Altruism can even be found in low-level organisms, such as the cellular slime molds (Figure 8.2). Slime molds are groups of cells that live as individuals until they are threatened by a lack of food, at which point they come together and form a multicellular organism in which some of the cells sacrifice themselves to promote the survival of other cells in the organism. Altruism, then, is truly all

around us.

Figure 8.2



Altruism is found in many organisms including even cellular slime molds (upper right). Tambako The Jaguar – [Squirrel monkeys in the grass](#) – CC BY-ND 2.0; [Wikimedia Commons](#) – CC BY-SA 2.0; Bill Gracey – [Birds Of A Feather – The Macaw Version](#) – CC BY-NC-ND 2.0; Tambako The Jaguar – [Snuggling jaguars](#) – CC BY-ND 2.0.

Reciprocal altruism is one example of the general principle of ***social exchange***. We frequently use each other to gain rewards and to help protect ourselves from harm, and helping is one type of benefit that we can provide to

others. In some cases, this exchange reflects overt [cooperation](#), such as when two students take notes for each other in classes that they miss or when neighbors care for each other's pets while one of them is away. In other cases, the exchange may be more subtle and indirect, for instance, when we help someone we don't really know, with the expectation that someone else may help us in return someday.

Social Reinforcement and Altruism: The Role of Rewards and Costs

Although there continues to be a lively debate within the social psychological literature about the relative contributions of each factor, it is clear that helping is both part of our basic human biological nature and also in part learned through our social experiences with other people (Batson, 2011).

The principles of social [learning](#) suggest that people will be more likely to help when they receive rewards for doing so. Parents certainly realize this—children who share their toys with others are praised, whereas those who act more selfishly are reprimanded. And research has found that we are more likely to help attractive rather than unattractive people of the other sex (Farrelly, Lazarus, & Roberts, 2007)—again probably because it is rewarding to do so.

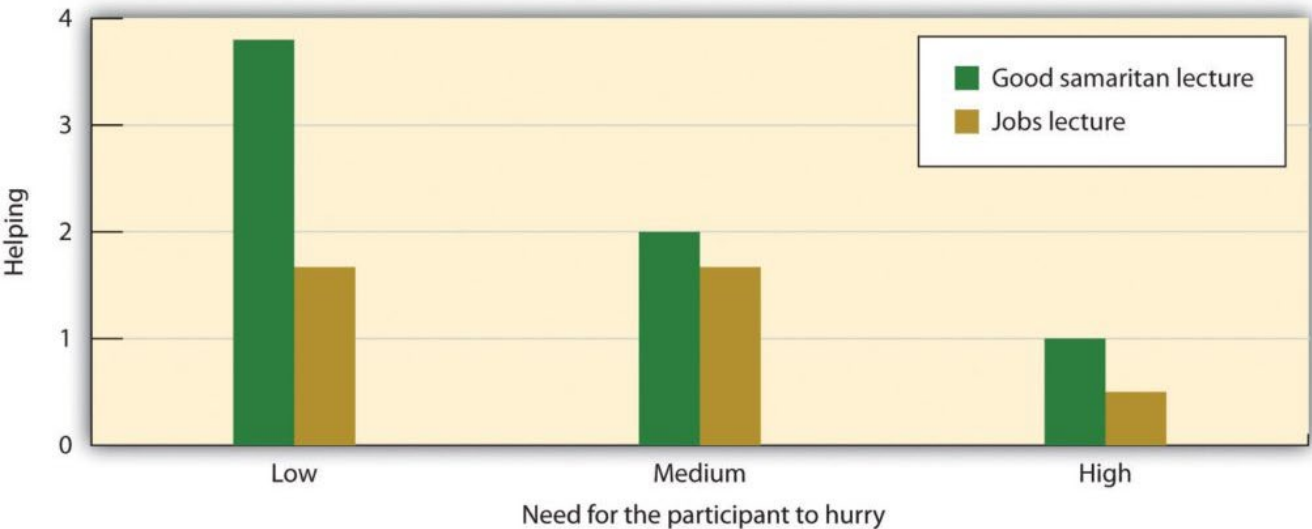
Darley and Batson (1973) demonstrated the effect of the costs of helping in a particularly striking way. They asked students in a religious seminary to prepare a speech for presentation to other students. According to [random assignment to conditions](#), one half of the seminarians prepared a talk on the parable of the altruistic Good Samaritan; the other half prepared a talk on the jobs that seminary students like best. The expectation was that preparing a talk on the Good Samaritan would prime the concept of being helpful for these students.

After they had prepared their talks, the religion students were then asked to walk to a nearby building where the speech would be recorded. However, and

again according to random assignment, the students were told that they had plenty of time to get to the recording session, that they were right on time, or that should hurry because they were already running late. On the way to the other building, the students all passed a person in apparent distress (actually research confederate) who was slumped in a doorway, coughing and groaning, and clearly in need of help. The dependent variable in the research was the degree of helping that each of the students gave to the person who was in need (Figure 9.3 “The Costs of Helping”).

Darley and Batson found that the topic of the upcoming speech did not have a significant impact on helping. The students who had just prepared a speech about the importance of helping did not help significantly more than those who had not. Time pressure, however, made a difference. Of those who thought they had plenty of time, 63% offered help, compared to 45% of those who believed they were on time and only 10% of those who thought they were late. You can see that this is exactly what would be expected on the basis of the principles of social reinforcement—when we have more time to help, then helping is less costly and we are more likely to do it.

Figure 8.3 – The Costs of Helping



The seminary students in the research by Darley and Batson (1973) were less likely to help a person in need when they were in a hurry than when they had more time, even when they were actively preparing a talk on the Good Samaritan. The dependent measure is a 5-point scale of helping, ranging from “failed to notice the victim at all” to “after stopping, refused to leave the victim or took him for help.”

Of course, not all helping is equally costly. The costs of helping are especially high when the situation is potentially dangerous or when the helping involves a long-term [commitment](#) to the person in need, such as when we decide to take care of a very ill person. Because helping strangers is particularly costly, some European countries have enacted Good Samaritan laws that increase the costs of not helping others. These laws require people, with the threat of a fine or other punishment if they do not, to provide or call for aid in an emergency if they can do so without endangering themselves in the process. Many countries and states also have passed “Angel of Mercy” laws that decrease the costs of helping and encourage people to intervene in emergencies by offering them protection from the law if their actions turn out not to be not helpful or even harmful. For instance, the current law in California states,

No person who in good faith, and not for compensation, renders emergency care at the scene of an emergency shall be liable for any civil damages resulting from any act or omission. The scene of an emergency shall not include emergency departments and other places where medical care is usually offered.

These policies are particularly applied to doctors and other medical professionals who are encouraged, or even required, to volunteer medical care when they happen upon emergencies.

In addition to learning through reinforcement, we are also likely to help more often when we model the helpful behavior of others (Bryan & Test, 1967). In fact, although people frequently worry about the negative impact of the [violence](#) that is seen on TV, there is also a great deal of helping behavior shown on TV. Smith et al. (2006) found that 73% of TV shows had some altruism and that about three altruistic behaviors were shown every hour. Furthermore, the prevalence of altruism was particularly high in children’s shows.

Viewing positive role models provides ideas about ways to be helpful to others

and gives us information about appropriate helping behaviors. Research has found a strong correlation between viewing helpful behavior on TV and helping. Hearold (1980) concluded on the basis of a [meta-analysis](#) that watching altruism on TV had a larger effect on helping than viewing TV violence had on aggressive behavior. She encouraged public officials and parents to demand more TV shows with prosocial themes and positive role models. But just as viewing altruism can increase helping, modeling of behavior that is not altruistic can decrease altruism. Anderson and Bushman (2001) found that playing violent video games led to a decrease in helping.

There are still other types of rewards that we gain from helping others. One is the status we gain as a result of helping. Altruistic behaviors serve as a type of signal about the altruist's personal qualities. If good people are also helpful people, then helping implies something good about the helper. When we act altruistically, we gain a reputation as a person with high status who is able and willing to help others, and this status makes us better and more desirable in the eyes of others. Hardy and Van Vugt (2006) found that both men and women were more likely to make cooperative rather than competitive choices in games that they played with others when their responses were public rather than private. Furthermore, when the participants made their cooperative choices in public, the participants who had been more cooperative were also judged by the other players as having higher social status than were the participants who had been less cooperative.

Finally, helpers are healthy! Research has found that people who help are happier and even live longer than those who are less helpful (Brown, Nesse, Vinokur, & Smith, 2003).

Social Norms for Helping

The outcome of reinforcement for and modeling of helping is the development of [social norms](#) of morality—standards of behavior that we see as appropriate and desirable regarding helping (Eisenberg & Fabes, 1998). One norm that we all are aware of and that we attempt to teach our children is based on the

principles of **equity** and exchange. The [reciprocity norm](#) is a social norm reminding us that we should follow the principles of **reciprocal altruism**—if someone helps us, then we should help them in the future, and we should help people now with the expectation that they will help us later if we need it. The reciprocity norm is found in everyday adages like “Scratch my back and I’ll scratch yours” and in religious and philosophical teachings such as the golden rule: “Do unto others as you would have them do unto you.” The reciprocity norm forms the basis of human cooperation and is found in every [culture](#). Because the rule is normally followed, people generally do help others who have helped them (Whatley, Webster, Smith, & Rhodes, 1999).

Because helping following the reciprocity norm is based on the return of earlier help and the expectation of a future return from others, it might not seem so much like true altruism to you. But we might also hope that our children internalize another relevant social norm that seems more altruistic—the [social responsibility norm](#). **The social responsibility norm** tells us that we *should try to help others who need assistance, even without any expectation of future paybacks*. The social responsibility norm involves a sense of duty and obligation, in which people are expected to respond to others by giving help to those in need. The teachings of many religions are based on the social responsibility norm that we should, as good human beings, reach out and help other people whenever we can.

Research Focus

Moral Hypocrisy

We have seen that the reciprocity norm teaches us that we should help others, with the expectation of a future return, and that the social responsibility norm teaches us that we should do the right thing by helping other people whenever we can, without the expectation of a payback. And most of us believe that we should be helpful to others. The problem is that these goals may not always be

easy for us to follow because they represent a classic case in which one of the basic human motives (other-concern) conflicts with another basic human motive (self-concern). Trying to do the best thing for ourselves in the short term may lead us to take the selfish road—taking advantage of the benefits that others provide us without returning the favor. Furthermore, we may be particularly likely to act selfishly when we can get away with it. Perhaps you can remember a time when you did exactly that—you acted in a selfish way but attempted nevertheless to appear to others not to have done so.

Daniel Batson and his colleagues (Batson, Thompson, Seuferling, Whitney, & Strongman, 1999) created a simple moral dilemma in the laboratory that pitted the desires of individual student research participants against the interests of other students. They compared what the students said they should do with what they actually did.

Each participant was told that there were two tasks being used in the research: In the positive task the participants would engage in an interesting task and have an opportunity to compete for a \$30 prize, but in the neutral task the task was described as boring and there was no opportunity to win anything. The moral dilemma was created when the experimenter informed the student participants that there was another student who had supposedly come to the experiment at the same time, and that each student had to be assigned to one of the two tasks. Furthermore, it was the job of the student participant to determine who should get which task.

The students were told that they could make the decision however they wanted and that the other student would never know who had made the decision. And they were also given a coin that they could use to help them make the decision if they wanted to use it. The coin was clearly marked—on one side it said “SELF to POSITIVE” and on the other side it said “OTHER to POSITIVE.” The participants were then left alone in a room and asked to determine who should get the

positive task and then to indicate what they thought the right decision should be.

In terms of what they thought they should do, Batson and his colleagues found that of the 40 students who participated in the experiment, 31 said that flipping the coin was the most morally right thing to do, 5 said assigning the other participant to the positive consequences task was the most morally right decision, and 4 said that there was no morally right way to assign the tasks. These results show that the students believed that being generous, or at least fair, was appropriate. This would suggest that most students would have flipped the coin and chosen whatever side came up.

It turned out that 12 of the participants decided not to flip the coin at all. Of these 12, 10 assigned themselves to the positive task and 2 gave the positive task to others. These students were clearly putting self-concern ahead of other-concern. But what about the 28 students who chose to flip the coin? They were clearly trying to do the “right” thing by being fair. By chance, we would have expected that about 14 of these 28 students would have assigned the other person to the positive task, because the coin would have come up “OTHER TO POSITIVE” about half of the time. But in fact only 4 actually did so; the other 24 took the positive task themselves, a significant difference from what would have been expected by chance if the participants had fairly used the actual results of the coin flip.

It appears that the students who flipped the coin wanted to be fair—they flipped the coin to see who would get the positive task. But in the end, they did not act on the principles of fairness when doing so conflicted with their self-interest. Rather, they tended to accept the results of the coin toss when it favored them but rejected it when it did not. Batson’s research makes clear the trade-offs that exist between helping ourselves and helping others. We know that helping is the right thing to do, but it hurts!

Key Takeaways

- Altruism refers to any behavior that is designed to increase another person's welfare, and particularly those actions that do not seem to provide a direct reward to the person who performs them.
- The tendency to help others is at least in part an [evolutionary adaptation](#). We are particularly helpful to our kin and to people we perceive as being similar to us. We also help people who are not related or similar as the result of reciprocal altruism. By cooperating with others, we increase our and others' chances of survival and reproductive success.
- We are more likely to help when we are rewarded and less likely when the perceived costs of helping are high.
- [Social norms](#) for helping include the reciprocity norm, which reminds us that we should follow the principles of reciprocal altruism, and the social responsibility norm, which tells us that we should try to help others who need assistance, even without any expectation of future payback.
- Helping frequently involves a trade-off between self-concern and other-concern. We want to help, but self-interest often keeps us from doing so.

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8.2 The Role of Affect: Moods and Emotions

Learning Objectives

1. Summarize the effects of positive and negative moods on helping.
2. Explain how the affective states of guilt, empathy, and personal distress influence helping.

Positive Moods Increase Helping

I do not need to tell you that people help more when they are in good mood. We ask our parents to use their car, and we ask our boss for a raise, when we think they are in a positive mood rather than a negative one. Positive moods have been shown to increase many types of helping behavior, including contributing to charity, donating blood, and helping coworkers (Isen, 1999). It is also relatively easy to put people in a good mood. You might not be surprised to hear that people are more likely to help after they've done well on a test or just received a big bonus in their paycheck. But research has found that even more trivial things, such as finding a coin in a phone booth, listening to a comedy recording, having someone smile at you, or even smelling the pleasant scent of perfume is enough to put people in a good mood and to cause them to be helpful (Baron & Thomley, 1994; Gueguen & De Gail, 2003; Isen & Levin, 1972).



In another study, van Baaren, Holland, Kawakami, and van Knippenberg (2004) had students interact with an experimenter who either mimicked them

by subtly copying their behaviors out of their awareness or did not mimic them. The researchers found that people who had been mimicked were more likely to help, by picking up pens that had fallen on the floor and by donating to a charity. It seems quite possible that this effect is due to the influence of positive moods on helping—we like people we see as similar to us and that puts us in a good mood, making us more likely to help. In sum, the influence of mood on helping is substantial (Carlson, Charlin, & Miller, 1988), so if you're looking for help, ask on a nice day, subtly mimic the person's behaviors, or prepare some good jokes.

But why does being in a good mood make us helpful? There are probably several reasons. For one, positive mood indicates that the environment is not dangerous and therefore that we can safely help others. Second, we like other people more when we are in good moods, and that may lead us to help them. Finally, and perhaps most important, is the possibility the helping makes us feel good about ourselves, thereby maintaining our positive mood. In fact, people who are in good moods are particularly likely to help when the help that they are going to give seems likely to maintain their positive mood. But if they think that the helping is going to spoil their good mood, even people in good moods are likely to refuse to help (Erber & Markunas, 2006).

Personal Distress and Empathy as Determinants of Helping

Imagine that you arrive upon the scene of a car accident that has just occurred. The driver of the car has been thrown out on the highway and is seriously injured. He is bleeding, has many broken bones, and may be near death. Other cars are just driving by the scene, but you could easily pull over to help. Would you be likely to just drive by, or would you stop to help?

The negative emotions that we may experience when we are perceiving another person's distress have a big influence on our helping. In some cases people feel rather sickened or disgusted by the victim of an emergency—for instance, when

the person is seriously injured and bleeding. Personal distress refers to *the negative emotions that we may experience when we view another person's suffering*. Because we feel so uncomfortable, when we feel personal distress we may simply leave the scene rather than stopping.

In other cases we may not feel so many negative emotions upon viewing another person in need but rather more positive feelings of a close connection with the person who is suffering. When we really experience the pain and the needs of the other person, we say that we are feeling empathy for the other. Empathy refers to *an affective response in which a person understands, and even feels, another person's distress and experiences events the way the other person does*. Empathy seems to be a biological aspect of human nature—an emotion that is an integral part of being human—and that is designed to help us help. Empathy allows us to quickly and automatically perceive and understand the emotional states of others and to regulate our behavior toward others in coordinated and cooperative ways (de Waal, 2008). Empathy may be related to other emotions, such as sympathy, compassion, and tenderness. You can well imagine that we are more likely to help someone when we are feeling empathy for them—in this case we want to comfort and help the victim of the car accident.

Research Focus

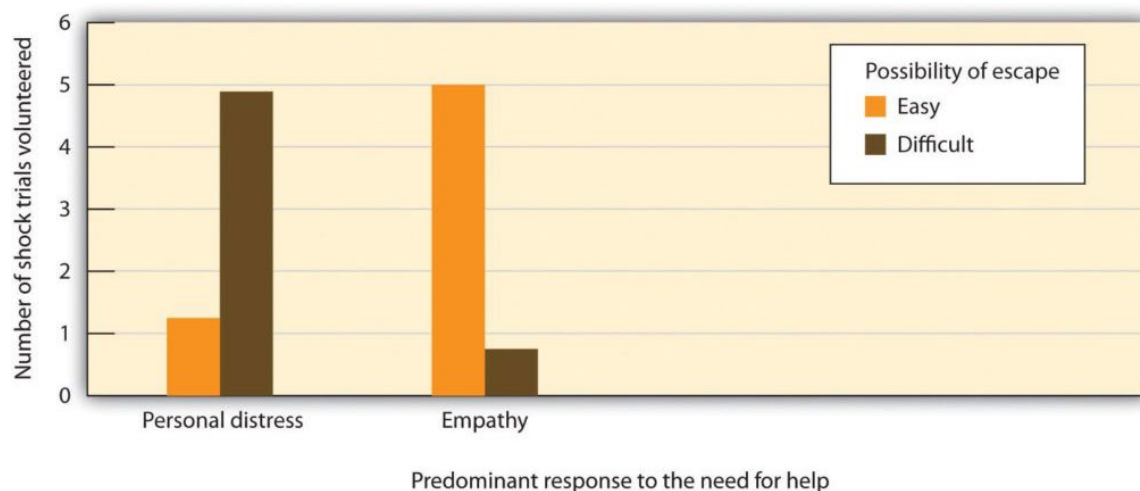
Personal Distress Versus Empathy as Determinants of Helping

We have seen that people may feel either positive or negative emotions when they see someone who needs help. They may help others in part for selfish reasons—for instance, to relieve their own negative feelings about the suffering of the other—and in part for truly altruistic reasons—because they are experiencing empathy for the distress of the other person. But which type of emotion leads us to help in which situations? Daniel Batson and his colleagues

(Batson, O'Quin, Fultz, Varnderplas, & Isen, 1983, Study 2) attempted answer this question by finding out if the ability to easily leave the scene of the suffering might matter. In the study, male and female college students watched another person of the same sex who they thought was working on series of tasks in the next room (the person was actually on a prerecorded videotape, although the participants did not know that). The women were told the person was named Elaine, and the men were told the person was named Charlie. During the time the students were watching, and as part of the experiment, the other person also supposedly received some mild electric shocks. The students who were observing were randomly assigned to one of two experimental conditions. The students who were in the easy-escape condition were told that although the other person would be completing 10 shock trials, they only needed to watch the first two, after which they could leave. The students in the difficult-escape condition, however, were told that they would need to watch all 10 of the shock trials. During the second trial, the person in other room began to look as if he or she was experiencing some discomfort. As the participants looked on, the assistant administering the shocks to the person asked whether he or she was all right, and the person hesitantly said yes but also asked for a glass of water before going on. During this break, the experimenter entered the observation room and gave the research participant a questionnaire. The questionnaire asked the participant to indicate the feelings he or she was experiencing at the moment, and the responses to these questions allowed the experimenters to determine whether the person was feeling more personal distress (if they indicated that they were primarily feeling alarmed, grieved, upset, worried, disturbed, distressed, troubled, or perturbed) or more empathy (if they indicated that they were primarily feeling sympathetic, moved, compassionate, warm, softhearted, or tender). Then, the experimenter pointed out to the research participant that the other person was feeling uncomfortable and asked if he or she might be willing to change places with that person. The dependent

measure in the research was the average number of trials that the participant agreed to take for Elaine or Charlie. As you can see in the following figure, Batson and the team found a person-situation interaction effect, such that when the participants knew that they could leave relatively quickly (the easy-escape condition), then the people who were feeling empathy helped, whereas those who were feeling distress did not. This makes sense because empathy involves a real concern for other person—a concern that could not be reduced even by leaving the scene. On other hand, when the participants knew that they were going to have to view all the trials (the difficult-escape condition), the participants who felt distress were more likely to help than were those who were feeling empathy. Batson and his colleagues interpreted this to mean that these people helped to avoid having to feel the negative emotion of personal distress which they were certain to experience as they continued to watch the other person suffer the shocks.

Figure 8.4



This figure shows the mean number of shock trials participants in each condition agreed to take for Elaine or Charlie. Data are from Batson et al. (1983), Study 2.

In subsequent research, Batson and his colleagues have tested this same hypothesis in other ways, such as by having the experimenter or the person in need of help appeal to the participants either to remain objective and “not get

caught up” in what the person in need is experiencing (low empathy) or to try to imagine what the person in need is feeling (high empathy). In many experiments, they have found that when empathy is high, most people help regardless of whether or not they can easily escape the situation. On other hand, people who feel primarily distress tend to help only if they cannot avoid the negative affect they are experiencing by leaving the scene of the person in need.

Although help that occurs as a result of experiencing empathy for the other seems to be truly altruistic, it is difficult even in this case to be to be sure. There is ample evidence that we do help to make those that we help feel better, but there is just as much evidence that we help in order to feel good about ourselves. Even when we are feeling empathy, we may help in part because we know that we will feel sad or guilty if we do not help (Schaller & Cialdini, 1988). Thus the distinction between an egoistic, self-concerned motive and an altruistic, other-concerned motive is not always completely clear; we help for both reasons.

In the end, we cannot completely rule out the possibility that people help in large part for selfish reasons. But does it really matter? If we give money to the needy because we will feel badly about ourselves if we do not, or if we give money to the needy because we want them to feel good, we have nevertheless made the contribution in both cases.

Key Takeaways

- We react to people in large part on the basis of how they make us feel and how we think we will feel if we help them.
- Positive mood states increase helping, and negative affective states, particularly guilt, reduce it.
- Personal distress refers to the negative feelings and emotions that we may experience when we view another person’s distress.
- Empathy refers to an affective response in which the person

understands, and even feels, the other person’s emotional distress, and when he or she experiences events the way the other person does.

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8.3 How the Social Context Influences Helping

Learning Objective

1. Review Bibb Latané and John Darley’s model of helping behavior and indicate the social psychological variables that influence each stage.

Although emotional responses such as guilt, [personal distress](#), and [empathy](#) are important determinants of [altruism](#), it is the [social situation](#) itself—the people around us when we are deciding whether or not to help—that has perhaps the most important influence on whether and when we help.

Consider the unusual case of the killing of 28-year-old Katherine “Kitty” Genovese in New York City at about 3:00 a.m. on March 13, 1964. Her attacker, Winston Moseley, stabbed and sexually assaulted her within a few yards of her apartment building in the borough of Queens. During the struggle with her assailant, Kitty screamed, “Oh my God! He stabbed me! Please help me!” But no one responded. The struggle continued; Kitty broke free from Moseley, but he caught her again, stabbed her several more times, and eventually killed her.

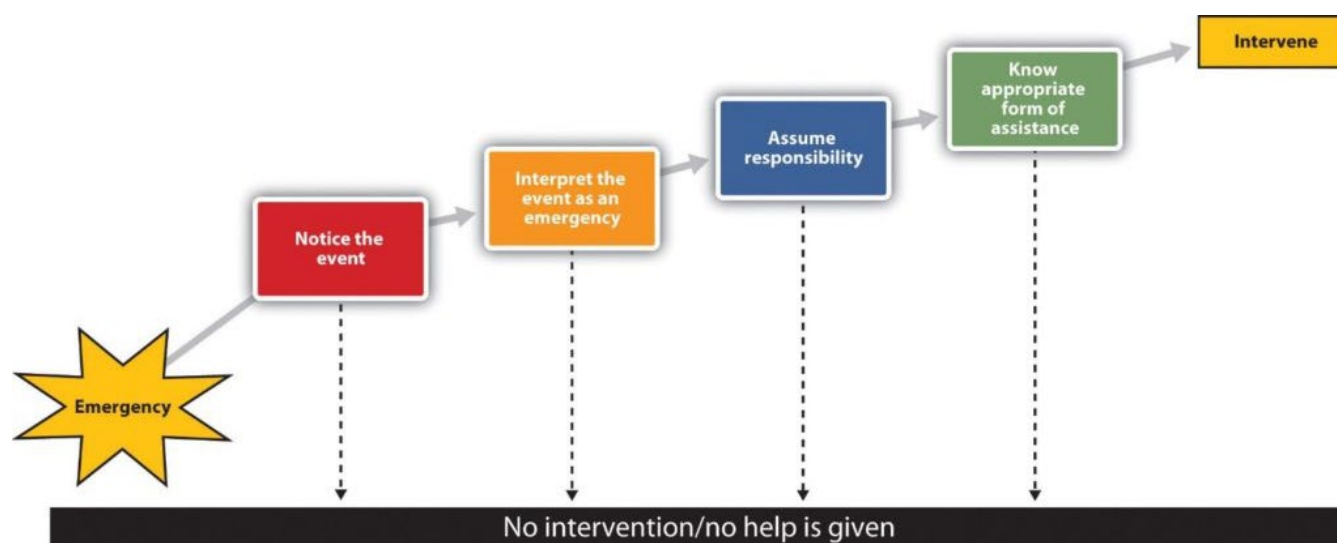
The murder of Kitty Genovese shocked the nation, in large part because of the (often inaccurate) reporting of it. Stories about the killing, in the *New York Times* and other papers, indicated that as many as 38 people had overheard the struggle and killing, that none of them had bothered to intervene, and that only one person had even called the police, long after Genovese was dead.

Although these stories about the lack of concern by people in New York City

proved to be false (Manning, Levine, & Collins, 2007), they nevertheless led many people to think about the variables that might lead people to help or, alternatively, to be insensitive to the needs of others. Was this an instance of the uncaring and selfish nature of human beings? Or was there something about this particular social situation that was critical? It turns out, contrary to your expectations I would imagine, that having many people around during an emergency can in fact be the opposite of helpful—it can reduce the likelihood that anyone at all will help.

Latané and Darley's Model of Helping

Two social psychologists, Bibb Latané and John Darley, found themselves particularly interested in, and concerned about, the Kitty Genovese case. As they thought about the stories that they had read about it, they considered the nature of emergency situations, such as this one. They realized that emergencies are unusual and that people frequently do not really know what to do when they encounter one. Furthermore, emergencies are potentially dangerous to the helper, and it is therefore probably pretty amazing that anyone helps at all. To better understand the processes of helping in an emergency, Latané and Darley developed a model of helping that took into consideration the important role of the social situation.



Noticing

Latané and Darley thought that the first thing that had to happen in order for people to help is that they had to notice the emergency. This seems pretty obvious, but it turns out that the social situation has a big impact on noticing an emergency. Consider, for instance, people who live in a large city such as New York City, Bangkok, or Beijing. These cities are big, noisy, and crowded—it seems like there are a million things going at once. How could people living in such a city even notice, let alone respond to, the needs of all the people around them? They are simply too overloaded by the stimuli in the city (Milgram, 1970).

Many studies have found that people who live in smaller and less dense rural towns are more likely to help than those who live in large, crowded, urban cities (Amato, 1983; Levine, Martinez, Brase, & Sorenson, 1994). Although there are a lot of reasons for such differences, just noticing the emergency is critical. When there are more people around, it is less likely that the people notice the needs of others.

You may have had an experience that demonstrates the influence of the social situation on noticing. Imagine that you have lived with a family or a roommate for a while, but one night you find yourself alone in your house or apartment because your housemates are staying somewhere else that night. If you are like me, I bet you found yourself hearing sounds that you never heard before—and they might have made you pretty nervous. Of course the sounds were always there, but when other people were around you, you were simply less alert to them. The presence of others can divert our attention from the environment—it's as if we are unconsciously, and probably quite mistakenly, counting on the others to take care of things for us.

Latané and Darley (1968) wondered if they could examine this phenomenon experimentally. To do so, they simply asked their research participants to complete a questionnaire in a small room. Some of the participants completed the questionnaire alone, while others completed the questionnaire in small

groups in which two other participants were also working on questionnaires.

A few minutes after the participants had begun the questionnaires, the experimenters started to release some white smoke into the room through a vent in the wall while they watched through a one-way mirror. The smoke got thicker as time went on, until it filled the room. The experimenters timed how long it took before the first person in the room looked up and noticed the smoke. The people who were working alone noticed the smoke in about 5 seconds, and within 4 minutes most of the participants who were working alone had taken some action. But what about the participants working in groups of three? Although we would certainly expect that having more people around would increase the likelihood that someone would notice the smoke, on average, the first person in the group conditions did not notice the smoke until over 20 seconds had elapsed. And although 75% of the participants who were working alone reported the smoke within 4 minutes, the smoke was reported in only 12% of the three-person groups by that time. In fact, in only three of the eight three-person groups did anyone report the smoke at all, even after it had entirely filled the room!

Interpreting

Even if we notice an emergency, we might not interpret it as one. The problem is that events are frequently ambiguous, and we must interpret them to understand what they really mean. Furthermore, we often don't see the whole event unfolding, so it is difficult to get a good handle on it. Is a man holding an iPod and running away from a group of pursuers a criminal who needs to be apprehended, or is this just a harmless prank? Were the cries of Kitty Genovese really calls for help, or were they simply an argument with a boyfriend? It's hard for us to tell when we haven't seen the whole event (Piliavin, Piliavin, & Broll, 1976). Moreover, because emergencies are rare and because we generally tend to assume that events are benign, we may be likely to treat ambiguous cases as not being emergencies.

The problem is compounded when others are present because when we are

unsure how to interpret events we normally look to others to help us understand them (this is informational [social influence](#)). However, the people we are looking toward for understanding are themselves unsure how to interpret the situation, and they are looking to us for information at the same time we are looking to them.

When we look to others for information we may assume that they know something that we do not know. This is often a mistake, because all the people in the situation are doing the same thing. None of us really know what to think, but at the same time we assume that the others do know.

Pluralistic ignorance occurs *when people think that others in their environment have information that they do not have and when they base their judgments on what they think the others are thinking.*

Pluralistic ignorance seems to have been occurring in Latané and Darley's studies, because even when the smoke became really heavy in the room, many people in the group conditions did not react to it. Rather, they looked at each other, and because nobody else in the room seemed very concerned, they each assumed that the others thought that everything was all right. You can see the problem—each bystander thinks that other people aren't acting because they don't see an emergency. Of course, everyone is confused, but believing that the others know something that they don't, each observer concludes that help is not required.

Pluralistic ignorance is not restricted to emergency situations (Miller, Turnbull, & McFarland, 1988; Suls & Green, 2003). Maybe you have had the following experience: You are in one of your classes and the instructor has just finished a complicated explanation. He is unsure whether the students are up to speed and asks, "Are there any questions?" All the class members are of course completely confused, but when they look at each other, nobody raises a hand in response. So everybody in the class (including the instructor) assumes that everyone understands the topic perfectly. This is pluralistic ignorance at its worst—we are all assuming that others know something that we don't, and so we don't act. The moral to instructors in this situation is clear: Wait until at least one student asks a question. The moral for students is also clear: Ask your

question! Don't think that you will look stupid for doing so—the other students will probably thank you.

Taking Responsibility

Even if we have noticed the emergency and interpret it as being one, this does not necessarily mean that we will come to the rescue of the other person. We still need to decide that it is our responsibility to do something. The problem is that when we see others around, it is easy to assume that they are going to do something and that we don't need to do anything. **Diffusion of responsibility** *occurs when we assume that others will take action and therefore we do not take action ourselves.* The irony of course is that people are more likely to help when they are the only ones in the situation than they are when there are others around.

Darley and Latané (1968) had study participants work on a communication task in which they were sharing ideas about how to best adjust to college life with other people in different rooms using an intercom. According to [random assignment to conditions](#), each participant believed that he or she was communicating with either one, two, or five other people, who were in either one, two, or five other rooms. Each participant had an initial chance to give his opinions over the intercom, and on the first round one of the other people (actually a confederate of the experimenter) indicated that he had an “epileptic-like” condition that had made the adjustment process very difficult for him. After a few minutes, the subject heard the [experimental confederate](#) say,

I-er-um-I think I-I need-er-if-if could-er-er-somebody er-er-er-er-er-er-er give me a little-er-give me a little help here because-er-I-er-I'm-er-er having a-a-a real problem-er-right now and I-er-if somebody could help me out it would-it would-er-er s-s-sure be-sure be good...because there-er-er-a cause I-er-I-uh-I've got a-a one of the-er-sei er-er-things coming on and-and-and I could really-er-use some help so if somebody would-er-give me a little h-help-uh-er-er-er-er-er c-could somebody-er-er-help-er-uh-

uh-uh (choking sounds)....I’m gonna die-er-er-I’m...gonna die-er-help-er-er-seizure-er- (chokes, then quiet). (Darley & Latané, 1968, p. 379)

As you can see in Table 8.2 “Effects of Group Size on Likelihood and Speed of Helping,” the participants who thought that they were the only ones who knew about the emergency (because they were only working with one other person) left the room quickly to try to get help. In the larger groups, however, participants were less likely to intervene and slower to respond when they did. Only 31% of the participants in the largest groups responded by the end of the 6-minute session. The social situation has a powerful influence on helping. We simply don’t help as much when other people are with us.

TABLE 8.2 EFFECTS OF GROUP SIZE ON LIKELIHOOD AND SPEED OF HELPING

Group size	Average helping (%)	Average time to help (in seconds)
2 (Participant and victim)	85	52
3 (Participant, victim, and 1 other)	62	93
6 (Participant, victim, and 4 others)	31	166

***Source: Darley and Latané (1968).**

Perhaps you have noticed diffusion of responsibility if you have participated in an Internet users group where people asked questions of the other users. Did you find that it was easier to get help if you directed your request to a smaller set of users than when you directed it to a larger number of people? Consider the following: In 1998, Larry Froistad, a 29-year-old computer programmer, sent the following message to the members of an Internet self-help group that had about 200 members. “Amanda I murdered because her mother stood between us...when she was asleep, I got wickedly drunk, set the house on fire, went to bed, listened to her scream twice, climbed out the window and set

about putting on a show of shock and surprise.” Despite this clear online confession to a murder, only three of the 200 newsgroup members reported the confession to the authorities (Markey, 2000).

To study the possibility that this lack of response was due to the presence of others, the researchers (Markey, 2000) conducted a field study in which they observed about 5,000 participants in about 400 different chat groups. The experimenters sent a message to the group, from either a male (JakeHarmen) or female (SuzyHarmen) screen name. Help was sought by either asking all the participants in the chat group, “Can anyone tell me how to look at someone’s profile?” or by randomly selecting one participant and asking “[name of selected participant], can you tell me how to look at someone’s profile?” The experimenters recorded the number of people present in the chat room, which ranged from 2 to 19, and then waited to see how long it took before a response was given.

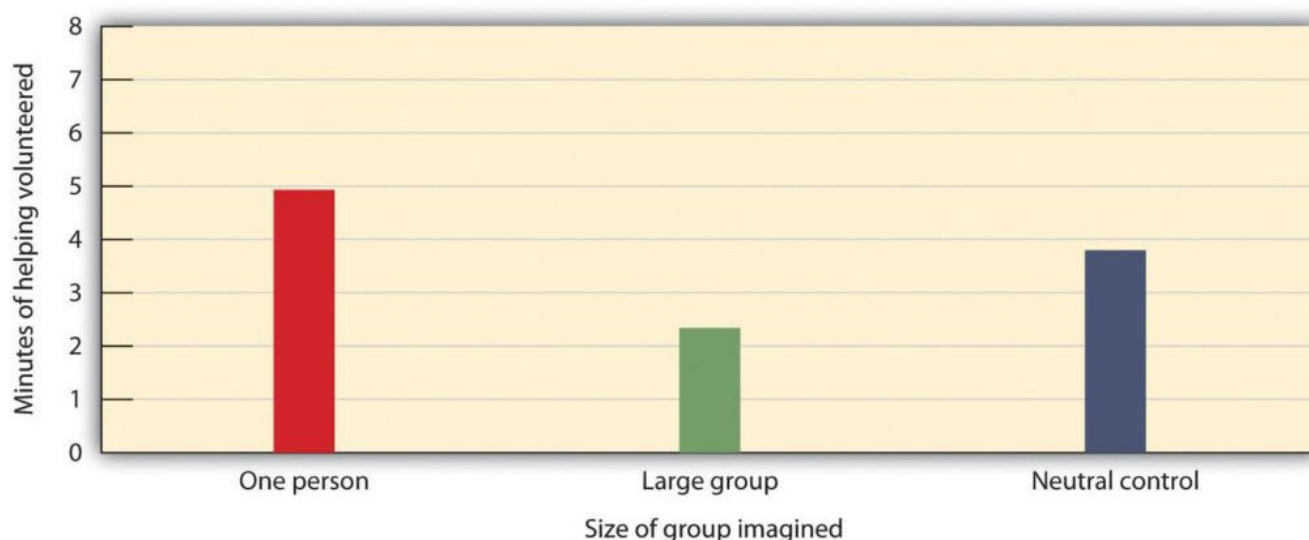
It turned out that the gender of the person requesting help made no difference, but that addressing to a single person did. Assistance was received more quickly when help was asked for by specifying a participant’s name (in only about 37 seconds) than when no name was specified (51 seconds). Furthermore, a correlational analysis found that when help was requested without specifying a participant’s name, there was a significant negative correlation between the number of people currently logged on in the group and the time it took to respond to the request.

Garcia, Weaver, Moskowitz, and Darley (2002) found that the presence of others can promote diffusion of responsibility even if those other people are only imagined. In these studies the researchers had participants read one of three possible scenarios that manipulated whether participants thought about dining out with 10 friends at a restaurant (group condition) or whether they thought about dining at a restaurant with only one other friend (one-person condition). Participants in the group condition were asked to “Imagine you won a dinner for yourself and 10 of your friends at your favorite restaurant.” Participants in the one-person condition were asked to “Imagine you won a

dinner for yourself and a friend at your favorite restaurant.”

After reading one of the scenarios, the participants were then asked to help with another experiment supposedly being conducted in another room. Specifically, they were asked: “How much time are you willing to spend on this other experiment?” At this point, participants checked off one of the following minute intervals: 0 minutes, 2 minutes, 5 minutes, 10 minutes, 15 minutes, 20 minutes, 25 minutes, and 30 minutes.

Figure 8.6 – Helping as a Function of Imagined Social Context



Garcia et al. (2002) found that the presence of others reduced helping, even when those others were only imagined.

As you can see in Figure 8.6 “Helping as a Function of Imagined Social Context”, simply imagining that they were in a group or alone had a significant effect on helping, such that those who imagined being with only one other person volunteered to help for more minutes than did those who imagined being in a larger group.

Implementing Action

The fourth step in the helping model is knowing how to help. Of course, for many of us the ways to best help another person in an emergency are not that clear; we are not professionals and we have little training in how to help in

emergencies. People who do have training in how to act in emergencies are more likely to help, whereas the rest of us just don't know what to do and therefore may simply walk by. On the other hand, today most people have cell phones, and we can do a lot with a quick call. In fact, a phone call made in time might have saved Kitty Genovese's life. The moral: You might not know exactly what to do, but you may well be able to contact someone else who does.

Latané and Darley's decision model of bystander intervention has represented an important theoretical framework for helping us understand the role of situational variables on helping. Whether or not we help depends on the outcomes of a series of decisions that involve noticing the event, interpreting the situation as one requiring assistance, deciding to take personal responsibility, and deciding how to help.

Fischer et al.'s (2011) [meta-analysis](#) analyzed data from over 105 studies using over 7,500 participants who had been observed helping (or not helping) in situations in which they were alone or with others. They found significant support for the idea that people helped more when fewer others were present. And supporting the important role of interpretation, they also found that the differences were smaller when the need for helping was clear and unambiguous and thus required little interpretation. They also found that there were at least some situations (such as when bystanders were able to help provide needed physical assistance) in which having other people around increased helping.

Although the Latané and Darley model was initially developed to understand how people respond in emergencies requiring immediate assistance, aspects of the model have been successfully applied to many other situations, ranging from preventing someone from driving drunk to making a decision about whether to donate a kidney to a relative (Schroeder, Penner, Dovidio, & Piliavin, 1995).

Key Takeaways

The social situation has an important influence on whether or not we help.

- Latané and Darley’s (cognitive) decision model of bystander intervention has represented an important theoretical framework for helping us understand the role of situational variables on helping. According to the model, whether or not we help depends on the outcomes of a series of decisions that involve noticing the event, interpreting the situation as one requiring assistance, deciding to take personal responsibility, and implementing action.
- Latané and Darley’s model has received substantial [empirical](#) support and has been applied not only to helping in emergencies but to other helping situations as well.

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Chapter 9: Aggression

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9.0 Aggression

Dad Kills Another Dad at a Youth Hockey Game

In 2002, a jury of nine women and three men found Thomas Junta, 44, guilty of involuntary manslaughter in the beating death of Michael Costin, 40. The deadly fight between the two fathers occurred after a hockey practice that their two sons attended in Reading, Massachusetts, on July 5, 2000.

The two men started fighting after arguing over rough play during hockey drills in which their sons participated. There were many witnesses to the incident, including Junta's son as well as Costin's three sons.

Junta's 12-year-old son said he saw Costin jump on his father's back, but he also said that Junta was kneeling over Costin and beating him and that he had screamed for his father to stop.

As reported by the medical examiner, Costin's body suffered a lot of trauma, including extensive bleeding in the brain.

Prosecutor Sheila Calkins described the fight, saying

“He was on top of him, straddling him...and pounding him on the left side of his head.”

Junta had a hard time keeping his composure on the witness stand, telling the court that he acted out of self-defense and was unaware of how badly he had injured Costin. Costin's own father and several of his other family members said they forgave Junta, noting that they want to put the incident behind them.

Source: <http://archives.cnn.com/2002/LAW/01/11/hockey.dads.trial>.

If you go to the movies tonight, you may choose to see one of the more violent ones, in which you will view depictions of assaults, kidnappings, murders, rapes, wars, or executions. If you turn on the TV or surf the Internet you'll likely see news reports of the real thing—more assaults, kidnappings, murders, rapes, wars, and executions. Indeed, there seems to be more and more violence every day, and we all live with the constant fear of terrorism by weapons of mass destruction. We also suffer more directly from aggression in our everyday life. When we get in our cars we may become the victim of aggressive driving by other drivers, or we may play violent video games that involve—well, more murder and killing. Even relaxing by watching sports on TV will lead us to see violence, as baseball players purposely bean each other with fastballs and hockey players start violent fistfights.

Indeed, the statistics on violence are sobering at many levels (Dutton, Boyanowsky, & Bond, 2005; Staub, 1989). In terms of wars, genocides, and mass killings, the 20th century was the most violent of any century in human existence, and the 21st century is shaping up to be just as brutal. There were over 15,000 homicides, 100,000 rapes, and a million assaults in the United States alone in the year 2006. Child abuse is common—it is estimated that over a million children are physically abused and over 150,000 are sexually abused each year in the United States. Sexual violence is also a serious problem. In the United States, over 20% of female college students report having experienced either an attempted or actual rape (Koss, Gidycz, & Wisniewski, 1987). A majority of college women and about a third of college men say they have experienced coercive sexual contact (Struckman-Johnson & Struckman-

Johnson, 1998). And aggression even shows up in children, who routinely fight and bully other children in school.

Although we have argued that people are generally caring toward others—that they have a basic desire to accept, care for, and help them—the violent events that surround us present a problem for this assumption. If people are generally good and care about others so much, then how could anyone possibly kill another human being, let alone participate in a suicide bombing or even genocide? Do aggressive events mean that people are naturally aggressive, violent, and hostile—or are they unusual events, shaped more by particularly extreme social situations that do not reflect the normal character of human beings?

We will answer these questions by considering the underlying principles of aggression—in terms of affect, cognition, and behavior, and in terms of the general goals of protecting the self and reaching out to others. (In this case, however, it is the former goal that prevails.) [Aggression](#) is wired into the deepest and oldest parts of our brain and yet is stimulated and controlled by social, situational, and cultural variables. In this chapter we will study the causes of aggression and make some suggestions for how we might be able to reduce it. Most importantly, we will see that—consistent with our analysis of human behavior more generally—aggression is not so much about the goal of harming others as it is about the goal of protecting the self.

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9.1 Defining Aggression →

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9.1 Defining Aggression

Learning Objectives

1. Define aggression and violence as social psychologists do.
2. Differentiate emotional from instrumental aggression.

[Aggression](#) is a word that we use every day to characterize the behavior of others and perhaps even of ourselves. We say that people are aggressive if they yell at or hit each other, if they cut off other cars in traffic, or even when they smash their fists on the table in frustration. But other harmful acts, such as the injuries that sports players receive during a rough game or the killing of enemy soldiers in a war might not be viewed by everyone as [aggression](#). Because aggression is so difficult to define, social psychologists (as well as many other people, including lawyers) judges and politicians, have spent a great deal of time trying to determine what should and should not be considered aggression. Doing so forces us to make use of the processes of [causal attribution](#) to help us determine the reasons for the behavior of others.

Social psychologists define **aggression** as *behavior that is intended to harm another individual who does not wish to be harmed* (**Baron & Richardson, 1994**). Because it involves the perception of intent, what looks like aggression from one point of view may not look that way from another, and the same harmful behavior may or may not be aggressive depending on its intent.



You can see that this definition rules out some behaviors that we might normally think are aggressive. For instance, a football linebacker who

accidentally breaks the arm of another player or a driver who accidentally hits a pedestrian would not by our definition be displaying aggression because although harm was done, there was no intent to harm. A salesperson who attempts to make a sale through repeated phone calls is not aggressive because he is not intending any harm. (We should say this behavior is “assertive” rather than aggressive.) And not all intentional behaviors that hurt others are aggressive behaviors. A dentist might intentionally give a patient a painful injection of a painkiller, but the goal is to prevent further pain during the procedure.

Because our definition requires us to determine the intent of the perpetrator, there is going to be some interpretation of these intents and there may well be disagreement among the parties involved. The U.S. government perceives the development of a nuclear weapon by North Korea as aggressive because the government believes that the weapon is intended to harm others, but North Korea may see the program as promoting self-defense. Although the player whose arm is broken in a football game may attribute hostile intent, the other player may claim that the injury was not intended. Within the legal system, juries and judges are frequently asked to determine whether harm was done intentionally.

Social psychologists use the term [violence](#) to refer to *aggression that has extreme physical harm, such as injury or death, as its goal*. Thus violence is a subset of aggression. All violent acts are aggressive, but only acts that are intended to cause extreme physical damage, such as murder, assault, rape, and robbery, are violent. Slapping someone really hard across the face might be **violent**, but calling people names would only be **aggressive**.

The type or level of intent that underlies an aggressive behavior creates the distinction between two fundamental types of aggression, which are caused by very different psychological processes. Emotional or [impulsive aggression](#) refers to *aggression that occurs with only a small amount of forethought or intent and that is determined primarily by impulsive emotions*. [Emotional aggression](#) is the result of the extreme negative emotions we’re

experiencing at the time that we aggress and is not really intended to create any positive outcomes. When Sarah yells at her boyfriend, this is probably [emotional aggression](#)—it is impulsive and carried out in the heat of the moment. Other examples are the jealous lover who strikes out in rage or the sports fans at my university who, after our basketball team won the national NCAA championship, lit fires and destroyed cars around the stadium.

[Instrumental aggression](#), on other hand, is *aggression that is intentional and planned*. Instrumental aggression is more cognitive than affective and may be completely cold and calculating. Instrumental aggression is aimed at hurting someone to gain something—attention, monetary reward, or political power, for instance. If the aggressor believes that there is an easier way to obtain the goal, the aggression would probably not occur. A bully who hits a child and steals her toys, a terrorist who kills civilians to gain political exposure, and a hired assassin are all good examples of [instrumental aggression](#).

Sometimes it is hard to distinguish between instrumental and emotional aggression, and yet it is important to try to do so. Emotional aggression is usually treated as second-degree homicide in the U.S. legal system, to differentiate it from cognitive, instrumental aggression (first-degree homicide). However, it may well be the case that all aggression is at least in part instrumental because it serves some need for the perpetrator. Therefore, it is probably best to consider emotional and instrumental aggression not as distinct categories but rather as endpoints on a continuum (Bushman & Anderson, 2001).

Social psychologists agree that aggression can be verbal as well as physical. Therefore, slinging insults at a boyfriend is definitely, according to our definition, aggressive, just as hitting someone is. [Physical aggression](#) is *aggression that involves harming others physically*—for instance hitting, kicking, stabbing, or shooting them. [Nonphysical aggression](#) is *aggression that does not involve physical harm*. Nonphysical aggression includes *verbal aggression* (yelling, screaming, swearing, and name calling) and ***relational or social aggression***, which is defined as

intentionally harming another person's social relationships, for instance by gossiping about another person, excluding others from our friendship, or giving others the "silent treatment" (Crick & Grotpeter, 1995). **Verbal aggression** also occurs in the form of sexual, racial, and homophobic jokes and epithets, which are designed to cause harm to individuals.

The list that follows this paragraph (adapted from Archer & Coyne, 2005) presents some examples of the types of nonphysical aggression that have been observed in children and adults. One reason that people may use nonphysical rather than physical aggression is that it is more subtle. When we use these techniques we may be able to better get away with it—we can be aggressive without appearing to others to be aggressing.

- Gossiping
- Spreading rumors
- Criticizing other people behind their backs
- Bullying
- Leaving others out of a group or otherwise ostracizing them
- Turning people against each other
- Dismissing the opinions of others
- "Stealing" a boyfriend or girlfriend
- Threatening to break up with partner if the partner does not comply
- Flirting with another person to make a partner jealous

Although the negative outcomes of physical aggression are perhaps more obvious, nonphysical aggression also has costs to the victim. Craig (1998) found that children who were victims of bullying showed more depression, loneliness, peer rejection, and anxiety in comparison to other children. In Great Britain, 20% of adolescents report being bullied by someone spreading hurtful rumors about them (Sharp, 1995). Girls who are victims of nonphysical aggression have been found to be more likely to engage in harmful behaviors such as smoking or considering suicide (Olafsen & Viemero, 2000). And Paquette and Underwood (1999) found that both boys and girls rated social aggression as making them feel more "sad" and "bad" than did physical aggression.

Recently, there has been an increase in school bullying through *cyberbullying*—aggression inflicted through the use of computers, cell phones, and other electronic devices (Hinduja & Patchin, 2009). Perhaps the most notable recent example was the suicide of 18-year-old Rutgers University student Tyler Clementi on September 22, 2010. Tyler’s last words before he died were shared through an update to his Facebook status:

“jumping off the gw bridge sorry”

Clementi’s suicide occurred after his roommate, Dharun Ravi, and Ravi’s friend Molly Wei secretly enabled a remote webcam in a room where Tyler and a male friend were sharing a sexual encounter and then broadcasted the streaming video footage across the Internet.

Cyberbullying can be directed at anyone, but lesbian, gay, bisexual, and transgendered (LGBT) students are most likely to be the targets (Potok, 2010). Blumenfeld and Cooper (2010) found that 54% of LGBT youth reported being cyberbullied within the past three months.

Hinduja and Patchin (2009) found that youth who report being victims of cyberbullying experience a variety of stresses from it, including psychological disorders, alcohol use, and in extreme cases, suicide. In addition to its emotional toll, cyberbullying also negatively affects students’ participation in, and success at, school.

Social Psychology in the Public Interest: Terrorism as Instrumental Aggression

There is perhaps no clearer example of the prevalence of violence in our

everyday lives than the increase in terrorism that has been observed in the past decades. These terrorist attacks have occurred in many countries across the world, in both Eastern as well as Western cultures. Even affluent Western democracies such as Denmark, Italy, Spain, France, Canada, and the United States have experienced terrorism, which has killed thousands of people, primarily innocent civilians. Terrorists use tactics such as killing civilians to create publicity for their causes and to lead the governments of the countries that are attacked to overrespond to the threats (McCauley, 2004).

How can we understand the motives and goals of terrorists? Are they naturally evil people whose primary desire is hurt others? Or are they more motivated to gain something for themselves, their families, or their countries? What are the thoughts and feelings that terrorists experience that drive them to their extreme behaviors? And what person and situational variables cause terrorism?

Prior research has attempted to determine if there are particular personality characteristics that describe terrorists (Horgan, 2005). Perhaps terrorists are individuals with some kind of deep psychological disturbance. However, the research conducted on various terrorist organizations does not reveal anything distinctive about the psychological makeup of individual terrorists.

Empirical data has also found little evidence for some of the situational variables that might have been expected to be important. There is little evidence for a relation between poverty or lack of education and terrorism. Furthermore, terrorist groups seem to be quite different from each other in terms of their size, organizational structure, and sources of support.

Arie Kruglanski and Shira Fishman (2006) have argued that it is best to understand terrorism not from the point of view of either particular personality traits or particular situational causes but rather as a type of instrumental aggression—a means to an end. In their view, terrorism is

simply a “tool,” a tactic of warfare that anyone from any nation, military group, or even a lone perpetrator could use.

Kruglanski and his colleagues argue that terrorists believe that they can gain something through their terrorist acts that they could not gain through other methods. The terrorist makes a cognitive, deliberate, and instrumental decision that his or her action will gain particular objectives. Furthermore, the goal of the terrorist is not to harm others but rather to gain something personally or for one’s religion, beliefs, or country. Even suicide terrorists believe that they are dying for personal gain—for instance, the promise of heavenly paradise, the opportunity to meet Allah and the prophet Muhammad, and rewards for members of one’s family (Berko & Erez, 2007). Thus, for the terrorist, willingness to die in an act of suicidal terrorism may be motivated not so much by the desire to harm others but rather by [self-concern](#)—the desire to live forever.

One recent example of the use of terrorism to promote one’s beliefs can be seen in the actions of Anders Behring Breivik, 32, who killed over 90 people in July 2011 through a bomb attack in downtown Oslo, Norway, and a shooting spree at a children’s campground. Breivik planned his attacks for years, believing that his actions would help spread his conservative beliefs about immigration and alert the Norwegian government to the threats posed by multiculturalism (and particularly the inclusion of Muslims in Norwegian society). This violent act of instrumental aggression is typical of terrorists.

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← 9.0 Aggression

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9.2 The Biological and Emotional Causes of Aggression

Learning Objectives

1. Explain how aggression might be evolutionarily adaptive.
2. Describe how different parts of the brain influence aggression.
3. Summarize the effects of testosterone and serotonin on aggression.

When we see so much [violence](#) around us every day, we might conclude that people have an innate tendency, or even an instinct, to be aggressive. Some well-known philosophers and psychologists have argued that this is the case. For instance, the philosopher Thomas Hobbes (1588–1679) took this view, arguing that humans are naturally evil and that only society could constrain their aggressive tendencies. On the other hand, the philosopher Jean-Jacques Rousseau (1712–1778) was more positive. He believed that humans are naturally gentle creatures who are aggressive only because we are taught to be so by our society. The psychologist Sigmund Freud, who lived through the disaster of World War I in which millions of his fellow human beings were massacred, argued that although people do have a “life instinct,” they also have a “death instinct”—an impulse toward destruction of themselves and others.

Is Aggression Evolutionarily Adaptive?



A belief in the innate aggressive tendencies of human beings—that the ability to be aggressive to others, at least under some circumstances, is part of our

fundamental human makeup—is consistent with the principles of evolutionary psychology. After all, the goal of maintaining and enhancing the self will, in some cases, require that we prevent others from harming us and those we care about. We may aggress against others because it allows us to gain access to valuable resources such as food and desirable mates or to protect ourselves from direct attack by others. And we may aggress when we feel that our social status is threatened. Therefore, if [aggression](#) helps in either our individual survival or in the survival of our genes, then the process of natural selection may well cause humans, as it would any other animal, to be aggressive. Human beings need to be able to aggress, and nature has provided us with these skills (Buss & Duntley, 2006). In certain situations where we are provoked almost all of us will aggress.

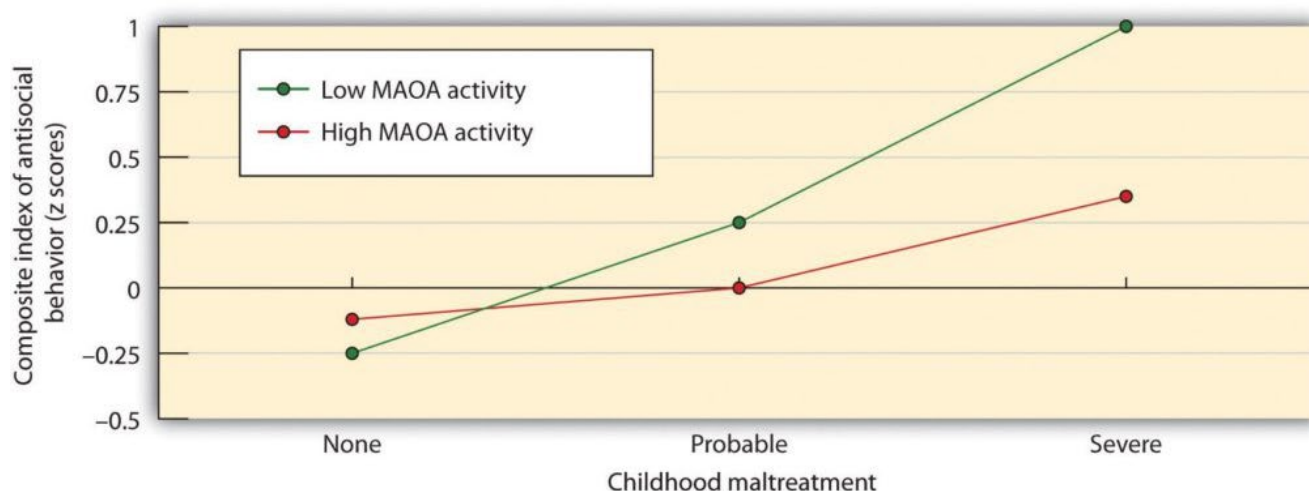
However, just because we can aggress does not mean that we will. It is not necessarily evolutionarily adaptive to aggress in all situations. For one, aggressing can be costly if the other person aggresses back. Neither people nor animals are always aggressive. Rather, they use aggression only when they feel that they absolutely need to (Berkowitz, 1993). In animals, the fight-or-flight response to threat leads them sometimes to attack and sometimes to flee the situation. Human beings have an even wider variety of potential responses to threat, only one of which is aggression. Again, the [social situation](#) is critical. We may react violently in situations in which we are uncomfortable or fearful or when another person has provoked us, but we may react more calmly in other settings. And there are cultural differences, such that violence is more common in some cultures than in others.

There is no doubt that aggression is in part genetically determined. Animals can be bred to be aggressive by breeding the most aggressive offspring with each other (Lagerspetz & Lagerspetz, 1971). Children who are aggressive as infants also are aggressive when they are adults (Coie & Dodge, 1998; Dubow, Huesmann, & Boxer, 2003; Raine, 1993), and identical twins are more similar than fraternal twins in their aggressive tendencies and criminal records. Behavioral genetics studies have found that criminal and aggressive behavior is correlated at about .7 for identical twins but only at about .4 for fraternal twins

(Tellegen et al., 1988).

Avshalom Caspi and his colleagues (2002) found evidence for the person x situation interaction in determining aggression. They focused on the influence of a particular genetic factor, the monoamine oxidase (MAOA) gene, located on the X chromosome, that produces an enzyme that influences the production of [serotonin](#), a neurotransmitter that influences mood, appetite, and sleep and that reduces aggression. Supporting the role of genetics in aggression, they found that individuals who had lower levels of activity of this gene were more at risk to show a variety of aggressive behaviors as adults. However, they also found that the genetic factor was only important for children who had also been severely mistreated. This person-by-situation interaction effect is shown in Figure 9.1. Although much more research is needed, it appears that aggressive behavior, like most other behaviors, is affected by an interaction between genetic and environmental variations.

Figure 9.1



Caspi and his colleagues (2002) found evidence for a person-by-situation interaction regarding the role of genetics and parental treatment in aggression. Antisocial behavior and aggression were greater for children who had been severely maltreated, but this effect was even stronger for children with a gene variation that reduced the production of serotonin.

Evolutionary principles suggest that we should be less likely to harm those who are genetically related to us than we are to harm others who are different. And research has supported this finding—for instance, biological parents are much

less likely to abuse or murder their own children than stepparents are to harm their stepchildren (Daly & Wilson, 1998, 1999). In fact, these researchers found that preschool children living with a stepparent or foster parent were many times more likely to be murdered by their parent than were children who lived with both biological parents.

The Role of Biology in Aggression

Aggression is controlled in large part by the area in the older part of the **brain** known as the amygdala (Figure 9.2 “Key Brain Structures Involved in Regulating and Inhibiting Aggression”). The amygdala is a brain region *responsible for regulating our perceptions of, and reactions to, aggression and fear*. The amygdala has connections with other body systems related to fear, including the sympathetic nervous system, facial responses, the processing of smells, and the release of neurotransmitters related to stress and aggression.

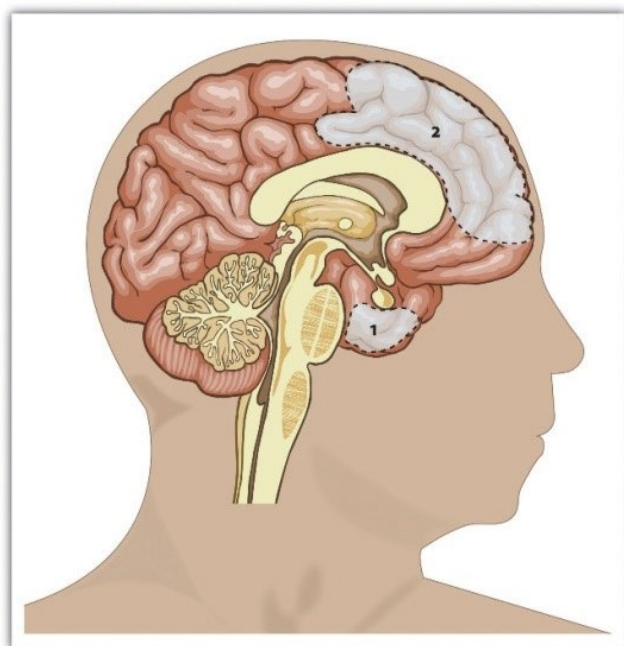
In addition to helping us experience fear, the amygdala also helps us learn from situations that create fear. The amygdala is activated in response to positive outcomes but also to negative ones, and particularly to stimuli that we see as threatening and fear arousing. When we experience events that are dangerous, the amygdala stimulates the brain to remember the details of the situation so that we learn to avoid it in the future. The amygdala is activated when we look at facial expressions of other people experiencing fear or when we are exposed to members of racial outgroups (Morris, Frith, Perrett, & Rowland, 1996; Phelps et al., 2000).

Although the amygdala helps us perceive and respond to danger, and this may lead us to aggress, other parts of the brain serve to control and inhibit our aggressive tendencies. One mechanism that helps us **control** our negative emotions and **aggression** is a neural connection between the amygdala and regions of the prefrontal cortex (Gibson, 2002).

The prefrontal cortex is in effect a control center for aggression: When it is

more highly activated, we are better able to control our aggressive impulses. Research has found that the cerebral cortex is less active in murderers and death row inmates, suggesting that violent crime may be caused at least in part by a failure or reduced ability to regulate emotions (Davidson, Jackson, & Kalin, 2000; Davidson, Putnam, & Larson).

Figure 9.2 – Key Brain Structures Involved in Regulating and Inhibiting Aggression



Brain regions that influence aggression include the amygdala (area 1) and the prefrontal cortex (area 2). Individual differences in one or more of these regions or in the interconnections among them can increase the propensity for impulsive aggression.

Hormones Influence Aggression: Testosterone and Serotonin

Hormones are also important in creating aggression. Most important in this regard is *the male sex hormone* testosterone, which is associated with increased aggression in both animals and in humans. Research conducted on a variety of animals has found a strong correlation between levels of testosterone and

aggression. This relationship seems to be weaker among humans than among animals, yet it is still significant (Dabbs, Hargrove, & Heusel, 1996).

In one study showing the relationship between testosterone and behavior, James Dabbs and his colleagues (Dabbs, Hargrove, & Heusel, 1996) measured the testosterone levels of 240 men who were members of 12 fraternities at two universities. They also obtained descriptions of the fraternities from university officials, fraternity officers, yearbook and chapter house photographs, and researcher field notes. The researchers correlated the testosterone levels and the descriptions of each of the fraternities. They found that the fraternities that had the highest average testosterone levels were also more wild and unruly, and in one case were known across campus for the crudeness of their behavior. The fraternities with the lowest average testosterone levels, on the other hand, were more well-behaved, friendly, academically successful, and socially responsible. Another study found that juvenile delinquents and prisoners who have high levels of testosterone also acted more violently (Banks & Dabbs, 1996).

Testosterone affects aggression by influencing the development of various areas of the brain that control aggressive behaviors. The hormone also affects physical development such as muscle strength, body mass, and height that influence our ability to successfully aggress.

Although testosterone levels are much higher in men than in women, the relationship between testosterone and aggression is not limited to males. Studies have also shown a positive relationship between testosterone and aggression and related behaviors (such as competitiveness) in women (Cashdan, 2003). Although women have lower levels of testosterone overall, they are more influenced by smaller changes in these levels than are men.

It must be kept in mind that the observed relationships between testosterone levels and aggressive behavior that have been found in these studies canNot prove that testosterone causes aggression—the relationships are only correlational. In fact, the effect of aggression on testosterone is probably stronger than the effect of testosterone on aggression. Engaging in aggression causes temporary increases in testosterone. People who feel that they have been

insulted show both more aggression as well as more testosterone (Cohen, Nisbett, Bosdile, & Schwarz, 1996), and the experience of stress is also associated with higher levels of testosterone and also with aggression. Even playing an aggressive game, such as tennis or chess, increases the testosterone levels of the winners and decreases the testosterone levels of the losers (Gladue, Boechler, & McCaul, 1989; Mazur, Booth, & Dabbs, 1992). Perhaps this is why the fans at my university rioted after our team *won* the basketball championship.

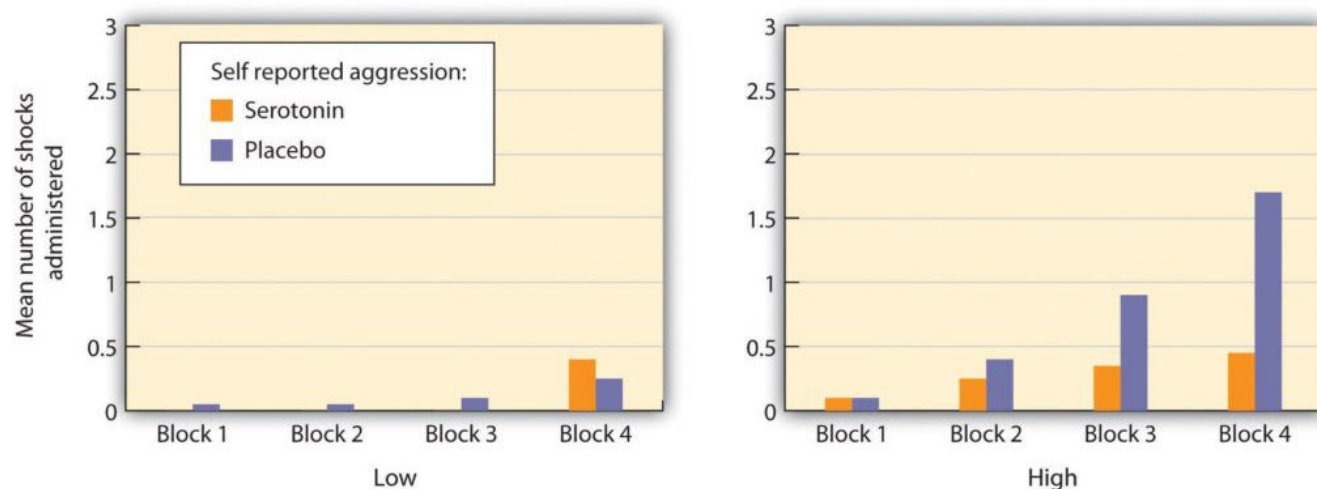
Testosterone is not the only biological factor linked to human aggression. Recent research has found that serotonin is also important, as serotonin tends to inhibit aggression. Low levels of serotonin have been found to predict future aggression (Kruesi, Hibbs, Zahn, & Keysor, 1992; Virkkunen, de Jong, Bartko, & Linnoila, 1989). Violent criminals have lower levels of serotonin than do nonviolent criminals, and criminals convicted of impulsive violent crimes have lower serotonin levels than criminals convicted of premeditated crimes (Virkkunen, Nuutila, Goodwin, & Linnoila, 1987).

In one experiment assessing the influence of serotonin on aggression, Berman, McCloskey, Fanning, Schumacher, and Coccaro (2009) first chose two groups of participants, one of which indicated that they had frequently engaged in aggression (temper outbursts, physical fighting, verbal aggression, assaults, and aggression toward objects) in the past, and a second group that reported that they had not engaged in aggressive behaviors.

In a laboratory setting, participants from both groups were then randomly assigned to receive either a drug that raises serotonin levels or a placebo. Then the participants completed a competitive task with what they thought was another person in another room. (The opponent's responses were actually controlled by computer.) During the task, the person who won each trial could punish the loser of the trial by administering electric shocks to the finger. Over the course of the game, the "opponent" kept administering more intense shocks to the participants.

As you can see in Figure 9.3, the participants who had a history of aggression were significantly more likely to retaliate by administering severe shocks to their opponent than were the less aggressive participants. The aggressive participants who had been given serotonin, however, showed significantly reduced aggression levels during the game. Increased levels of serotonin appear to help people and animals inhibit impulsive responses to unpleasant events (Soubrié, 1986).

Figure 9.3



Participants who reported having engaged in a lot of aggressive behaviors (right panel) showed more aggressive responses in a competitive game than did those who reported being less aggressive (left panel). The aggression levels for the more aggressive participants increased over the course of the experiment for those who did not take a dosage of serotonin but aggression did not significantly increase for those who had taken serotonin. Data are from Berman et al. (2009).

Drinking Alcohol Increases Aggression

Perhaps not surprisingly, research has found that the consumption of alcohol increases aggression. In fact, excessive alcohol consumption is involved in a majority of violent crimes, including rape and murder (Abbey, Ross, McDuffie, & McAuslan, 1996). The evidence is very clear, both from [correlational research](#) designs and from experiments where participants are randomly assigned either to ingest or not ingest alcohol, that alcohol increases the likelihood that people will respond aggressively to provocations (Bushman, 1997; Ito, Miller, & Pollock, 1996; Graham, Osgood, Wells, & Stockwell, 2006). Even people who

are not normally aggressive may react with aggression when they are intoxicated (Bushman & Cooper, 1990).

Alcohol increases aggression for a couple of reasons. For one, alcohol disrupts executive functions, which are the cognitive abilities that help us plan, organize, reason, achieve goals, control emotions, and inhibit behavioral tendencies (Séguin & Zelazo, 2005). Executive functioning occurs in the prefrontal cortex, which is the area that allows us to control aggression. Alcohol therefore reduces the ability of the person who has consumed it to inhibit his or her aggression (Steele & Southwick, 1985). Acute alcohol consumption is more likely to facilitate aggression in people with low, rather than high, executive functioning abilities.

Secondly, when people are intoxicated, they become more self-focused and less aware of the social situation, a state that is known as *alcohol myopia*. As a result, they are less likely to notice the social constraints that normally prevent them from engaging aggressively and are less likely to use those social constraints to guide them. We might normally notice the presence of a police officer or other people around us, which would remind us that being aggressive is not appropriate, but when we are drunk we are less likely to be so aware. The narrowing of attention that occurs when we are intoxicated also prevents us from being aware of the negative outcomes of our aggression. When we are sober, we realize that being aggressive may produce retaliation as well as cause a host of other problems, but we are less likely to be aware of these potential consequences when we have been drinking (Bushman & Cooper, 1990).

Alcohol also influences aggression through expectations. If we expect that alcohol will make us more aggressive, then we tend to become more aggressive when we drink. The sight of a bottle of alcohol or an alcohol advertisement increases aggressive thoughts and hostile attributions about others (Bartholow & Heinz, 2006), and the belief that we have consumed alcohol increases aggression (Bègue et al., 2009).

Negative Emotions Cause Aggression

If I were to ask you about the times that you have been aggressive, you probably would tell me that many of them occurred when you were angry, in a bad mood, tired, in pain, sick, or frustrated. And you would be right—we are much more likely to aggress when we are experiencing negative emotions. When we are feeling ill, when we get a poor grade on an exam, or when our car doesn't start—in short, when we are angry and frustrated in general—we are likely to have many unpleasant thoughts and feelings, and these are likely to lead to violent behavior. Aggression is caused in large part by the negative emotions that we experience as a result of the aversive events that occur to us and by our negative thoughts that accompany them (Berkowitz & Heimer, 1989).

One kind of negative affect that increases arousal when we are experiencing it is frustration (Berkowitz, 1989; Dollard, Doob, Miller, Mowrer, & Sears, 1939). Frustration occurs when we feel that we are not obtaining the important goals that we have set for ourselves. We get frustrated when our computer crashes while we are writing an important paper, when we feel that our social relationships are not going well, or when our schoolwork is going poorly. How frustrated we feel is also determined in large part through social comparison. If we can make downward comparisons with important others, in which we see ourselves as doing as well or better than they are, then we are less likely to feel frustrated. But when we are forced to make upward comparisons with others, we may feel frustration. When we receive a poorer grade than our classmates received or when we are paid less than our coworkers, this can be frustrating to us.

Although frustration is one cause of the negative affect that can lead to aggression, there are other sources as well. In fact, anything that leads to discomfort or negative emotions can increase aggression. For instance, working in extremely high temperatures is known to increase aggression—when we are hot, we are more aggressive. Griffit and Veitch (1971) had students complete questionnaires either in rooms in which the heat was at a normal temperature or in rooms in which the temperature was over 90 degrees Fahrenheit. The

students in the latter conditions expressed significantly more hostility.

Hotter temperatures are associated with higher levels of aggression and violence (Anderson, Anderson, Dorr, DeNeve, & Flanagan, 2000). Hotter regions generally have higher violent crime rates than cooler regions, and violent crime is greater on hot days than it is on cooler days, and during hotter years than during cooler years (Bushman, Wang, & Anderson, 2005). Even the number of baseball batters hit by pitches is higher when the temperature at the game is higher (Reifman, Larrick, & Fein, 1991). Researchers who study the relationship between heat and aggression have proposed that global warming is likely to produce even more violence (Anderson & Delisi, 2011). Pain also increases aggression. Berkowitz (1993) reported a study in which participants were made to feel pain by placing their hands in a bucket of ice-cold water, and it was found that this source of pain also increased subsequent aggression.

Research Focus

The Effects of Provocation and Fear of Death on Aggression

McGregor et al. (1998) demonstrated that people who have been provoked by others may be particularly aggressive if they are also experiencing negative emotions about the fear of their own death. The participants in the study had been selected, on the basis of prior reporting, to have either politically liberal or politically conservative views. When they arrived at the lab they were asked to write a short paragraph describing their opinion of politics in the United States. In addition, half of the participants (the *mortality salient condition*) were asked to “briefly describe the emotions that the thought of your own death arouses in you” and to “Jot down as specifically as you can, what you think will happen to you as you physically die, and once you are physically dead.” Participants in the *exam control condition* also thought about a negative event, but not one associated

with a fear of death. They were instructed to “Please briefly describe the emotions that the thought of your next important exam arouses in you” and to “Jot down as specifically as you can, what you think will happen to you as you physically take your next exam, and once you are physically taking your next exam.”

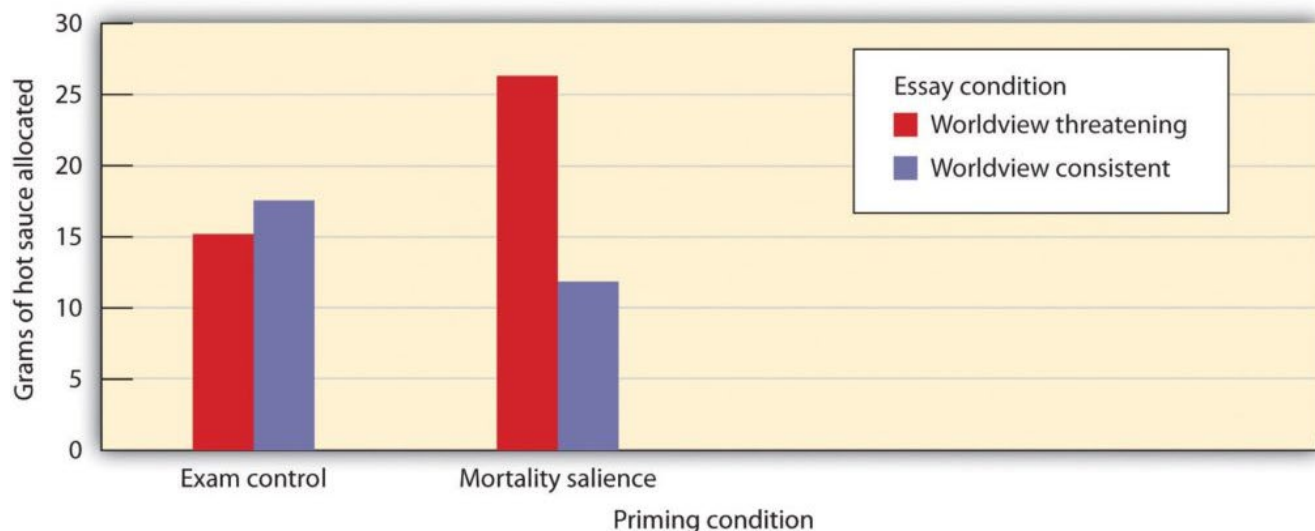
Then the participants read an essay that had supposedly just been written by another person in the study. (The other person did not exist, but the participants didn’t know this until the end of the experiment.) The essay that the participants read had been prepared by the experimenters to condemn politically liberal views or to condemn politically conservative views. Thus one-half of the participants were provoked by the other person by reading a statement that strongly conflicted with their own political beliefs, whereas the other half read an essay that supported their (liberal or conservative) beliefs.

At this point the participants moved on to what they thought was a completely separate study in which they were to be tasting and giving their impression of some foods. Furthermore, they were told that it was necessary for the participants in the research to administer the food samples to each other. The participants then found out that the food they were going to be sampling was spicy hot sauce and that they were going to be administering the sauce to the same person whose essay they had just read! In addition, the participants read some information about the other person that indicated that the other person very much disliked eating spicy food. Participants were given a taste of the hot sauce (which was very hot) and then instructed to place a quantity of it into a cup for the other person to sample. Furthermore, they were told that the other person had to eat all the sauce.

As you can see in Figure 9.4 “Mortality [Salience](#) and Aggression”, this research provides another example of how negative feelings can lead

us to be aggressive after we have been provoked. The threatening essay had little effect on the participants in the exam control condition. On the other hand, the participants who were both provoked by the other person and who had also been reminded of their own death administered significantly more aggression than did the participants in the other three conditions.

Figure 9.4 – Mortality Salience and Aggression



A threat to one's worldview increased aggression but only for participants who had been thinking about their own death. Data are from McGregor et al. (1998).

Just as negative feelings can increase aggression, positive affect can reduce it. In one study (Baron & Ball, 1974), participants were first provoked by an [experimental confederate](#). Then the participants were, according to random assignment, shown either funny cartoons or neutral pictures. When the participants were given an opportunity to retaliate by giving shocks as part of an experiment on [learning](#), those who had seen the positive cartoons gave fewer shocks than those who had seen the neutral pictures.

It seems that feeling good about ourselves, or feeling good about others, is incompatible with anger and aggression. You can see that this is in essence the flip side of the results we discussed in Chapter 9 “Helping and [Altruism](#)” regarding [altruism](#): Just as feeling bad leads us to aggress, feeling good makes us more likely to help and less likely to hurt others. This makes

perfect sense, of course, since emotions are signals regarding the threat level around us. When we feel good, we feel safe and do not think that we need to aggress.

Of course, negative emotions do not always lead to aggression toward the source of our frustration. If we get a bad grade from our teacher or a ticket from a police officer, it is not likely that we will directly aggress against him or her. Rather, we may displace our aggression onto others, and particularly toward others who seem similar to the source of our frustration (Miller, Pedersen, Earleywine, & Pollock, 2003). Displaced aggression *occurs when negative emotions caused by one person trigger aggression toward a different person.* A recent meta-analysis has found clear evidence that people who are provoked but are unable to retaliate against the person who provoked them are more aggressive toward an innocent other person, and particularly toward people who are similar in appearance to the true source of the provocation, in comparison to those who were not previously provoked (Marcus-Newhall, Pedersen, Carlson, & Miller, 2000).

It is clear that negative affect increases aggression. And you will recall that emotions that are accompanied by high arousal are more intense than those that have only low levels of arousal. Thus it would be expected that aggression is more likely to occur when we are more highly aroused, and indeed this is the case. For instance, in his important research on arousal, Dolf Zillmann (Zillman, Hoyt, & Day, 1974; Zillman, Katcher, & Milavsky, 1972) found that many types of stimuli that created arousal, including riding on a bicycle, listening to an erotic story, and experiencing loud noises, tended to increase both arousal as well as aggression. Arousal probably has its effects on aggression in part through the misattribution of emotion. If we are experiencing arousal that was actually caused by a loud noise or by any other cause, we might misattribute that arousal as anger toward someone who has recently frustrated or provoked us.

Can We Reduce Negative Emotions by

Engaging in Aggressive Behavior?

We have seen that when we are experiencing strong negative emotions accompanied by arousal, such as when we are frustrated, angry, or uncomfortable, or anxious about our own death, we may be more likely to aggress. However, if we are aware that we are feeling these negative emotions, we might try to find a solution to prevent ourselves from lashing out at others. Perhaps, we might think, if we can release our negative emotions in a relatively harmless way, then the probability that we will aggress might decrease. Maybe you have tried this method. Have you ever tried to yell really loud, hit a pillow, or kick something when you are angry, with the hopes that doing so will release your aggressive tendencies?

The idea that engaging in less harmful aggressive actions will reduce the tendency to aggress later in a more harmful way, known as [catharsis](#), is an old one. It was mentioned as a way of decreasing violence by the Greek philosopher Aristotle and was an important part of the theories of Sigmund Freud. Many others believe in catharsis too. Russell, Arms, and Bibby (1995) reported that more than two-thirds of the people they surveyed believed in catharsis, agreeing with statements that suggested that participating in and observing aggressive sports and other aggressive activities is a good way to get rid of one's aggressive urges. People who believe in the value of catharsis use it because they think that doing so is going to make them feel better (Bushman, Baumeister, & Phillips, 2001). The belief in catharsis leads people to engage in popular techniques such as venting and cathartic therapies, even though numerous studies have shown that these approaches are Not effective.

It is true that reducing negative affect and arousal can reduce the likelihood of aggression. For instance, if we are able to distract ourselves from our negative emotions or our frustration by doing something else, rather than ruminating on it, we can feel better and will be less likely to aggress. However, as far as social psychologists have been able to determine, attempting to remove negative emotions by engaging in or observing aggressive behaviors (that is, the idea of catharsis) simply does Not work.

In one relevant study, Bushman, Baumeister, and Stack (1999) first had their participants write an article about their opinions about a social topic such as abortion. Then they convinced them that another participant had read the article and provided very negative feedback about it. The other person said such things as, “This is one of the worst essays I have read!” Then the participants read a message suggesting that catharsis really did work. (It claimed that engaging in aggressive action is a good way to relax and reduce anger.) At this point half of the participants were allowed to engage in a cathartic behavior—they were given boxing gloves, some instructions about boxing, and then got a chance to hit a punching bag for two minutes.

Then all the participants got a chance to engage in aggression with the same person who had angered them earlier. The participant and the partner played a game in which the losing person on each trial received a blast of noise. At the beginning of each trial each participant was permitted to set the intensity of the noise that the other person would receive if he or she lost the trial, as well as the duration of the loser’s suffering, because the duration of the noise depended on how long the winner pressed the button.

Contrary to the catharsis hypothesis, the students who punched the punching bag did not release and reduce their aggression as the message they had read suggested would happen. Rather, these students actually set a higher noise level and delivered longer bursts of noise than did the participants who did not get a chance to hit the punching bag. It seems that if we hit a punching bag, punch a pillow, or scream as loud as we can, with the idea of releasing our frustration, the opposite occurs—rather than decreasing aggression, these behaviors in fact increase it (Bushman et al., 1999). Participating in aggression simply makes us more, not less, aggressive.

One prediction that could be derived from the catharsis idea is that countries that are currently fighting wars would show less domestic aggression than those that are not. After all, the citizens in these countries read about the war in the newspapers and see images of it on TV on a regular basis—wouldn’t that reduce

their needs and desires to aggress in other ways? Again, the answer is no. Rather than decreasing, aggression increases when the country that one lives in is currently or recently fighting a war. In an archival study, Archer and Gartner (1976) found that countries that were in wars experienced significant postwar increases in their rates of homicide. These increases were large in magnitude, occurred after both large wars and smaller wars, with several types of homicide rate indicators, in victorious as well as defeated nations, in nations with both improved and worsened postwar economies, among both men and women offenders, and among offenders of several age groups. Homicide rate increases occurred with particular consistency among nations with large numbers of combat deaths.

The increases in aggression that follow from engaging in aggressive behavior are not unexpected—and they occur for a variety of reasons. For one, engaging in a behavior that relates to violence, such as punching a pillow, increases our arousal. Furthermore, if we enjoy engaging in the aggressive behavior, we may be rewarded, making us more likely to engage in it again. And aggression reminds us of the possibility of being aggressive in response to our frustrations. In sum, relying on catharsis by engaging in or viewing aggression is dangerous behavior—it is more likely to increase the flames of aggression than to put them out. It is better to simply let the frustration dissipate over time or perhaps to engage in other nonviolent but distracting activities.

Key Takeaways

- The ability to aggress is part of the evolutionary adaptation of humans. But aggression is not the only, nor always the best, approach to dealing with conflict.
- The amygdala plays an important role in monitoring fearful situations and creating aggressive responses to them. The prefrontal cortex serves as a regulator to our aggressive impulses.
- The male sex hormone testosterone is closely associated with aggression in both men and women. The neurotransmitter serotonin

helps us inhibit aggression.

- Negative emotions, including fear, anger, pain, and frustration, particularly when accompanied by high arousal, may create aggression.
- Contrary to the idea of catharsis, social psychological research has found that engaging in aggression does Not reduce further aggression.

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9.3 The Violence Around Us: How the Social Situation Influences Aggression

Learning Objectives

1. Review the situational variables that increase and decrease [aggression](#).
2. Explain the different effects of reward, punishment, and modeling on aggression.
3. Review the influences of viewing violent behavior on aggression and explain why these effects might occur.

Although emotions and biology are critical, they are not the only determinants of our aggression. Of particular importance to social psychologists is the role of the [social situation](#).

Social Learning and Modeling: Is Aggression Learned?

As would be expected by principles of social reinforcement, if we are rewarded for being aggressive, we'll likely aggress again, but if we are punished for our [violence](#), we may subsequently curb our aggression. The child who gets a toy by hitting another child and taking it is likely to continue being aggressive in the future, particularly if he or she is not punished for the action. Children who are more aggressive are also often seen as more competent, in part because they can use their aggression to get their way (Hawley, 2007). Björkqvist et al.



(2001) found that girls who use [nonphysical aggression](#) reported being less lonely and were more likely to have higher status than did nonaggressive girls. In another study, aggressive boys were more likely to be accepted by their peers than were nonaggressive boys (Salmivalli, Kaukiainen, & Lagerspetz, 2000). [Aggression](#) seems to be paying off for these students.

Some aggression is learned through **modeling** the **violence** that we see all around us every day (Bandura & Walters, 1959). In his important research on aggression, Albert Bandura demonstrated that children learned new aggressive behaviors by observing aggressive models (**Bandura, 1973**). Bandura argued that we don't just imitate the specific behaviors that we see, but that viewing aggression changes our schemas and our attitudes about aggression. Watching a parent hitting the other parent may not only increase a child's likelihood of hitting but may also increase his or her beliefs that "hitting is OK" and that "one way to solve problems is by hitting." Modeling teaches new ideas about aggression and can help explain why exposure to violence increases aggressive behavior in the long run (Huesmann & Kirwil, 2007).

Modeling is particularly problematic for children who grow up in violent families. These children are not only the victims of aggression, but they also see violence being inflicted on their parents and siblings. Because children learn how to be parents in large part by modeling the actions of their parents, it is no surprise that there is a strong correlation between family violence in childhood and violence as an adult. Children who witness their parents being violent or who are themselves abused are more likely as adults to inflict abuse on their partners and children (Heyman & Slep, 2002). In turn, their own children are also more likely to interact violently with each other and to aggress against their parents (Patterson, Dishion, & Bank, 1984).

Although rewards clearly increase aggression, do you think that punishment decreases it? Judicial systems are based in large part on punishing people for being aggressive, with fines, jail terms, and even the death penalty being used as punishments. It has been argued that the dramatic decrease in crime in New York City during the 1990s was due to the "zero tolerance" policy of then Mayor

Guiliani, in which the police gave tickets for even minor crimes such as vandalism and jaywalking.

There is, however, a problem with using punishment to reduce aggression, particularly when the punishment is itself aggressive. The problem is that the punishment may be modeled, which can increase the aggressive behaviors that we are trying to stop. In a recent [meta-analysis](#), Gershoff (2002) found that although children who were spanked by their parents were more likely to immediately comply with the parents' demands, they were also more aggressive, showed less ability to control aggression, and had poorer mental health in the long term. The problem seems to be that children who are punished for bad behavior may be more likely to change their behavior only for external reasons, rather than internalizing the norms of being good for its own sake.

Punishment is most effective when it is intense, prompt (before the person can derive much pleasure from the aggression), applied consistently and with certainty, perceived as justified, and replaced by a more desirable alternative behavior (Berkowitz, 1993). But even if punishment occurs under these ideal conditions, it may only suppress aggressive behavior temporarily (Baron & Richardson, 1994; Berkowitz, 1993).

One example of the use of violence to attempt to stop violence is capital punishment—the use of the death penalty. Although banned in many countries, capital punishment is used in the United States in some cases of premeditated homicide. Although many people believe that capital punishment deters crime, there is little evidence that it actually does (Archer, Gartner, & Beittel, 1983). For one, the time period between the crime and the punishment is many years long, which makes it less effective as a deterrent. Second, most of the crimes that are punished by the death penalty involve [emotional aggression](#) and are not premeditated. They occur during arguments or while the perpetrator is under the influence of alcohol or recreational drugs. In these cases, even if the perpetrator has knowledge of the death penalty, this knowledge is not likely to have much effect on reducing crime. And capital punishment also means that

many innocent people are wrongly executed for crimes they did not commit.

Violence Creates More Violence: Television, Video Games, and Handguns

The average American child watches over four hours of television every day, and these programs contain both physical and nonphysical aggression (Coyne & Archer, 2005). Furthermore, the amount, intensity, and graphic nature of the violence that children view continues to escalate every year. It has been estimated that by the age of 12, the average American child has seen over 8,000 murders and 100,000 acts of violence (Huston et al., 1992). At the same time, children are also exposed to violence in movies, video games, and virtual reality games, as well as in popular music and music videos that include violent lyrics and imagery.

Given your knowledge about the importance of the social situation, it might not surprise you to hear that these situational exposures to violence have an effect on aggressive behavior, and in fact they do. The evidence is impressive and clear: The **more media violence** people, including children, view, the **more aggressive** they are likely to be (Anderson et al., 2003; Cantor et al., 2001). The relation between viewing TV violence and aggressive behavior is about as strong as the relation between smoking and cancer or between studying and academic grades (Bushman & Huesmann, 2010). If you watch a lot of violence, you are likely to be more aggressive!

The evidence is so clear because it has come through the accumulation of many studies conducted over many years, using a variety of research designs. These studies have included laboratory and [field experiments](#), as well as both cross-sectional and longitudinal correlational studies, and have used people from many different cultures. In the correlational studies, many potential common-causing variables, such as intelligence, family background, socioeconomic status, and personality, have been controlled. The potential for reverse causation has been eliminated through studies that have shown that viewing

violence at a young age tends to predict aggressive behavior when the child is older, more than the other way around. Furthermore, laboratory studies in which people have been randomly assigned to view either violent or nonviolent material have shown the same results (Paik & Comstock, 1994; Zillman & Weaver, 1999). In one study, Coyne, Archer, and Eslea (2004) found that adolescents who viewed either physical or nonphysical aggression were subsequently more likely to behave in an aggressive manner than those who viewed no aggression.

Research Focus

The Effects of Violent Video Games on Aggression

It is clear that watching TV violence can increase aggression, but what about violent video games? These games are more popular than ever and also more graphically violent. Children spend countless hours playing video games, many of which involve engaging in extremely violent behaviors. The games often require the player to take the role of a violent person, to identify with the character, to select victims, and of course to kill people. These behaviors are rewarded by winning points and moving on to higher levels and are repeated over and over.

Again, the answer is clear—playing **violent video games** leads to **aggression**. A **meta-analysis** (Anderson & Bushman, 2001) reviewed 35 research studies that had tested the effects of playing violent video games on aggression. The studies included both experimental and correlational studies, with both male and female participants in both laboratory and field settings. They found that exposure to violent video games is significantly linked to increases in aggressive thoughts, aggressive feelings, psychological arousal (including blood pressure and heart rate), as well as aggressive behavior. Furthermore, playing more video games was found to

relate to less altruistic behavior.

Bushman and Anderson (2002) directly assessed the effects of viewing violent video games on aggressive thoughts and behavior. In one of their studies, participants were randomly assigned to play either a violent or a nonviolent video game for 20 minutes. Each participant played one of four violent video games (Carmageddon, Duke Nukem, Mortal Kombat, or Future Cop) or one of four nonviolent video games (Glider Pro, 3D Pinball, Austin Powers, or Tetra Madness).

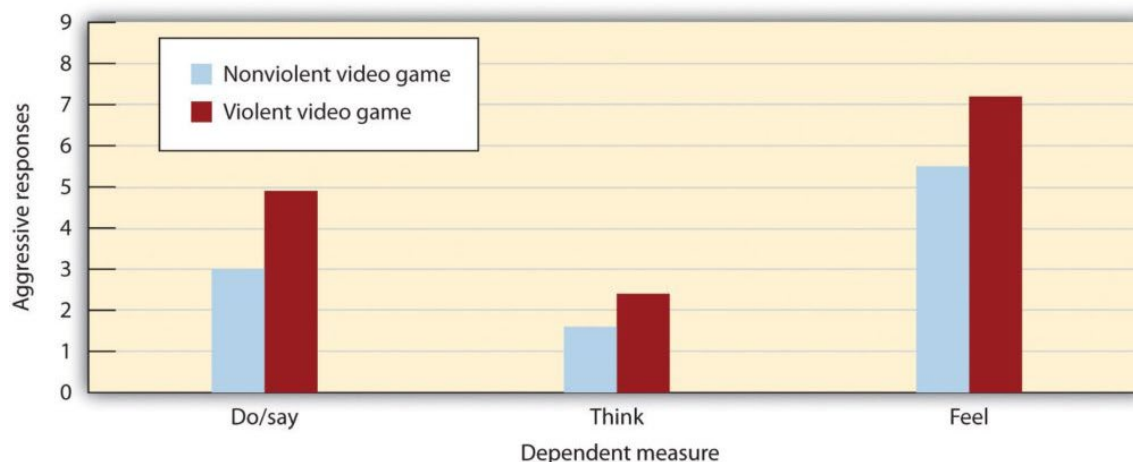
Participants then read a story—for instance, this one about Todd—and were asked to list 20 thoughts, feelings, and actions about how they would respond if they were Todd:

Todd was on his way home from work one evening when he had to brake quickly for a yellow light. The person in the car behind him must have thought Todd was going to run the light because he crashed into the back of Todd's car, causing a lot of damage to both vehicles. Fortunately, there were no injuries. Todd got out of his car and surveyed the damage. He then walked over to the other car.

As you can see in Figure 9.5, the students who had played one of the violent video games responded much more aggressively to the stories than did those who played the nonviolent games. In fact, their responses were often extremely aggressive. They said things like “Call the guy an idiot,” “Kick the other driver's car,” “This guy's dead meat!” and “What a dumbass!” Other studies have found similar results (Konijn, Nije Bijvank, & Bushman, 2007), and longitudinal studies in the United States and in Japan have shown that playing violent video games predicts aggressive behaviors and thoughts several months later, even after controlling for initial level of

aggression (Anderson, Gentile, & Buckley, 2007; Anderson et al., 2008).

Figure 9.5



Participants who had recently played a violent video game expressed significantly more violent responses to a story than did those who had recently played a nonviolent video game. Data are from Bushman and Anderson (2002).

Why Does Viewing Violence Lead to Aggression?

There is strong evidence that viewing aggression on TV, playing violent video games, and exposure to violence in general tends to **increase** the likelihood of **aggression**. But why might viewing violence increase aggression?

Perhaps the strongest possibility is also the simplest—that viewing violence increases the cognitive accessibility of **violence**. When we see violence, violence is then activated in memory and becomes ready to guide our subsequent thinking and behavior in more aggressive ways. One way of understanding this process is shown in Figure 9.6. According to this model, the activation from the viewed violence spreads automatically in memory from the perceived violent acts to other aggressive ideas and in the end increases the likelihood of engaging in violence (Anderson, Benjamin, & Bartholow, 1998).

Figure 9.6



Priming Aggression Adapted from Anderson et al. (1998).

In the United States, most homicides are perpetrated with handguns. Every day, thousands of children bring guns to school, and gun-related violence kills an American child every three hours (Geen & Donnerstein, 1998; O'Donnell, 1995). People who keep guns in their home are about 3 times more likely to be killed by that gun—particularly at the hands of a family member—and are also likely to kill themselves with it (Cummings, Koepsell, Grossman, Savarino, & Thompson, 1997; Wintemute, Parham, Beaumont, Wright, & Drake, 1999).

Although it is true that it is people and not the guns themselves that do the killing, principles of [social psychology](#) make it clear why possessing guns is so dangerous. Guns provide cues about violence, which makes it more likely that people will respond to provocation with aggression. In any particular situation of conflict or confrontation, we have several choices. We might try to escape the situation, we might confront the person in a nonviolent way, or we might choose to use violence. The presence of guns reminds us that we may respond with violence. When guns are around, violence is highly cognitively accessible, and this accessibility increases the likelihood of responding to provocation with violence. This is often referred to as the weapons effect (particularly with guns).

Research has shown that the presence of guns provides a highly [salient](#) cue,

which reminds us that aggression is a possible response to threat. Anderson, Benjamin, and Bartholow (1998) found that just having participants think about guns primed thoughts about aggression. But the link does not end there. In addition to [priming](#) aggressive thoughts and feelings, viewing handguns also increases violent behavior, particularly when we are provoked (Carlson, Marcus-Newhall, & Miller, 1990).

In one relevant study (Berkowitz & Lepage, 1967), male university students were given either one or seven painful electrical shocks, supposedly from another student, and then were given an opportunity to shock this person in return. In some cases, a 12-gauge shotgun and a .38-caliber revolver were lying on the table near the shock key, whereas in other conditions two badminton racquets were near the key. The researchers found, first, that the students who had been shocked more times returned significantly more shocks to the partner than did those who had been shocked only once. But what about the presence of the guns? The researchers found that the guns did not significantly increase aggression for the participants who had received only one shock, but it did increase aggression for those who had received seven shocks. The presence of the guns seems to have elicited more aggressive responses from those who had been most provoked by the shocks. Given what you know about the importance of situational effects on priming, these results may not surprise you.

Another way that viewing violence increases aggression is through modeling. Children (and even adults) may simply imitate the violence they observe. Indeed, there is substantial evidence that people do copy the aggression that they read about or see in the media. For instance, when John Hinckley Jr. attempted to assassinate President Ronald Reagan in 1981, he was influenced by the violence that he had recently viewed in the movie *Taxi Driver*, as well as an infatuation with the movie actress Jodi Foster. Research also has found strong evidence for copycat suicides. The rate of suicide in the general population increases significantly in the months after famous people, for instance Marilyn Monroe or Kurt Cobain, commit suicide (Phillips & Carstensen, 1986). In short, viewing violence teaches us how and when we should be aggressive.

Another outcome of viewing large amounts of violent material is desensitization, *the tendency to become used to, and thus less influenced by, a stimulus*. When we first see violence, we are likely to be shocked, aroused, and even repulsed by it. However, as we see more and more violence over time, we become habituated to it, such that subsequent exposures produce fewer and fewer negative emotional responses. In the end, we may begin to see violence as a normal part of everyday life and become accepting of it.

In sum, continually viewing violence substantially changes how we think about and how our brains respond to the events that occur to us (Bartholow, Bushman, & Sestir, 2006). Frequent exposure to violence primes aggression and makes aggressive behavior more likely (Molitor & Hirsch, 1994). And viewing aggression frequently makes that aggression seem more normal and less negative. If we create for ourselves a world that contains a lot of violence, we become more distrustful and more likely to behave aggressively in response to conflict (Nabi & Sullivan, 2001).

The Surprising Decline in Violence

- What does Pinker mean when he says that violence has declined? Describe evidence.
- Why has violence declined?

Key Takeaways

- Aggression can be explained in part by the general principles of [learning](#), including reinforcement, punishment, and modeling.
- Reinforcement is more effective than punishment in reducing aggression.
- Viewing violence in TV shows, movies, and video games tends to create aggression in the viewer.
- Exposure to violence increases aggression through reinforcement, through modeling, by priming cognitions related to aggression, and through desensitization.

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10.0 Competition and Cooperation in Our Social Worlds

Chesapeake Bay Watermen Question Limits on Crab Harvests

In 2001, the crabbing industry in the Chesapeake Bay was on the verge of collapse. As a result, officials from the states of Maryland and Virginia imposed new regulations on overfishing. The restrictions limited fishing to just 8 hours per day and ended the crab season a month earlier than in the past. The aim of the new regulations was to reduce the crab harvest by 15%, which, in turn, was an attempt to maintain the \$150-million-per-year industry.

But many crabbers did not agree that their fishing was responsible for this collapse. They felt that poor water quality had killed off underwater sea grasses that made the natural hiding places for small crabs, leaving them vulnerable to predatory fish. Fisherman Eddie Evans believes that the solution for reviving the crab population was to give out more fishing licenses.

“We’ve got millions and millions of fish in the bay,” Evans said. “If we could catch more fish it could help the crab population.”

Because the number of bay crabs was declining at a fast pace, though, government officials and conservation groups said there was a need for

preventive measures. The U.S. Environmental Protection Agency confirmed the overexploitation of crab stocks and felt there was definite justification for the changes. Bill Goldsborough, a fishery scientist at the Chesapeake Bay Foundation, supports the curb on crab harvests.

“I would say most sincerely that what is being attempted here is a comprehensive effort, a bay-wide effort, that for over two years has utilized the best scientific information in an attempt to improve the fishery,” he said.

But many watermen felt their own needs were being overlooked. The new regulations, [they](#) said, would undoubtedly hurt the livelihood of many crabbers. “The crabbers are going to be hurt and a lot of them will fall by the wayside,” said Larry Simns, president of the Maryland Watermen’s Association.

On Smith Island, a small fishing community that is fully dependent on blue crab harvests, waterman Roland Bradshaw says that local incomes could fall by 25 percent as a result of the new regulations.

“This is our livelihood, this is my living. You probably might lose your boat or your home—either one,” Bradshaw said. “They’re persecuting us. For the watermen, this is it.”

[Source](#): Stoppkotte, K. (2001, May 10). Chesapeake Bay watermen question limits on crab harvests. *National Geographic Today*. Retrieved from http://news.nationalgeographic.com/news/2001/05/0510_crabbing.html.

One of the most important themes of this book has been the extent to which the two human motives of [self-concern](#) and [other-concern](#) guide our everyday behavior. We have seen that although these two underlying goals are in many ways in direct opposition to each other, they nevertheless work together to create successful human outcomes. Particularly important is the fact that we

cannot protect and enhance ourselves and those we care about without the help of the people around us. We cannot live alone—we must cooperate, work with, trust, and even provide help to other people in order to survive. The self-concern motive frequently [leads](#) us to desire to not do these things because they sometimes come at a cost to the self. And yet in the end, we must create an appropriate balance between self and other.

In this chapter, we revisit this basic topic one more time by considering the roles of self-concern and other-concern in social relationships between people and the social groups they belong to, and among social groups themselves. We will see, perhaps to a greater extent than ever before, how important our relationships with others are and how careful we must be to develop and use these connections. Most important, we will see again that helping others also helps us help ourselves.

Furthermore, in this chapter, we will investigate the broadest level of [analysis](#) that we have so far considered—focusing on the cultural and societal level of analysis. In so doing, we will consider how the goals of self-concern and other-concern apply even to large groups of individuals, such as nations, societies, and cultures, and influence how these large groups interact with each other.

Most generally, we can say that when individuals or groups interact they may take either *cooperative* or *competitive* positions (De Dreu, 2010; Komorita & Parks, 1994). When we cooperate, the parties involved act in ways that they perceive will benefit both themselves and others. [Cooperation](#) is behavior that occurs *when we trust the people or groups with whom we are interacting and are willing to communicate and share with the others*, expecting to profit ourselves through the increased benefits that can be provided through joint behavior. On the other hand, when we engage in competition we *attempt to gain as many of the limited rewards as possible for ourselves, and at the same time we may work to reduce the likelihood of success for the other parties*. Although competition is not always harmful, in some cases one or more of the parties may feel that their self-interest has not been adequately met and may attribute the cause of this outcome to another party (Miller, 2001). In these cases of perceived inequity or unfairness, competition may lead to [conflict](#), in

which the parties involved engage in violence and hostility (De Dreu, 2010).

Although competition is normal and will always be a part of human existence, cooperation and sharing are too. Although they may generally look out for their own interests, individuals do realize that there are both costs and benefits to always making selfish choices (Kelley & Thibaut, 1978). Although we might prefer to use as much gasoline as we want, or to buy a couple of new mp3s rather than contribute to the local food bank, at the same time we realize that doing so may have negative consequences for the group as a whole. People have simultaneous goals of cooperating and competing, and the individual must coordinate these goals in making a choice (De Dreu, 2010; Schelling, 1960/1980).

We will also see that human beings, as members of cultures and societies, internalize social norms that promote other-concern, in the form of *morality* and social fairness norms, and that these norms guide the conduct that allows groups to effectively function and survive (Haidt & Kesebir, 2010). As human beings, we want to do the right thing, and this includes accepting, cooperating, and working with others. And we will do so when we can. However, as in so many other cases, we will also see that the social situation frequently creates a powerful force that makes it difficult to cooperate and easy to compete.

A social dilemma is a *situation in which the goals of the individual conflict with the goals of the group* (Penner, Dovidio, Piliavin, & Schroeder, 2005; Suleiman, Budescu, Fischer, & Messick, 2004; Van Lange, De Cremer, Van Dijk, & Van Vugt, 2007). Social dilemmas impact a variety of important social problems because the dilemma creates a type of trap: Even though an individual or group may want to be cooperative, the situation leads to competitive behavior. For instance, the watermen we considered in the chapter opener find themselves in a social dilemma—they want to continue to harvest as many crabs as they can, and yet if they all do so, the supply will continue to fall, making the situation worse for everyone.

Although social dilemmas create the potential for conflict and even hostility, those outcomes are not inevitable. People usually think that situations of potential conflict are [fixed-sum outcomes](#), meaning that *a gain for one side necessarily means a loss for the other side or sides* (Halevy, Chou, & Murnighan, 2011). But this is not always true. In some cases, the outcomes are instead [integrative outcomes](#), meaning that *a solution can be found that benefits all the parties*. In the last section of this chapter, we will consider the ways that we can work to increase cooperation and to reduce competition, discussing some of the contributions that social psychologists have made to help solve some important social dilemmas (Oskamp, 2000a, 2000b).

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10.1 Conflict, Cooperation, ...→

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10.1 Conflict, Cooperation, Morality, and Fairness

Learning Objectives

1. Review the situational variables that increase or decrease competition and conflict.
2. Differentiate harm-based morality from social conventional morality, and explain how morality works to help people cooperate.
3. Define distributive justice and procedural justice, and explain the influence of fairness norms on cooperation and competition.

Whether we cooperate or compete is determined, as are most human behaviors, in part by the characteristics of the individuals who are involved in the relationship and in part by the [social situation](#) that surrounds them. Let's begin by considering first the situational determinants of competition and conflict.

Competition and Conflict

Conflict between individuals, between groups, and even between individuals and the social groups they belong to is a common part of our social worlds. We compete with other students to get better grades, and nations fight wars to gain territory and advantage. Businesses engage in competitive practices, sometimes in a very assertive manner, to gain market share. The behaviors of the parties that are in conflict are not necessarily designed to harm the others but rather are the result of the goals of self-enhancement and self-preservation. We



compete to gain rewards for ourselves and for those with whom we are connected, and doing so sometimes involves trying to prevent the other parties from being able to gain the limited rewards for themselves.

Although competition does not necessarily create overt hostility, competition does sow the seeds for potential problems, and thus hostility may not be far off. One problem is that negative feelings tend to escalate when parties are in competition. In these cases, and particularly when the competition is intense, negative behavior on the part of one person or group may be responded to with even more hostile responses on the part of the competing person or group.

In his Robbers' Cave summer camp studies, Muzafer Sherif and his colleagues (Sherif, Harvey, White, Hood, & Sherif (1961) created intergroup competition between the boys in the Rattlers club and the boys in the Eagles club. When the Eagles began by stealing the flag from the Rattlers' cabin, the Rattlers did not respond merely by stealing a flag in return but rather, replied with even more hostile and negative behaviors. It was as if "getting even" was not enough—an even greater retaliation was called for. Similar escalation happened during the Cold War, when the United States and the Soviet Union continued to increase their nuclear arsenals, engaging in more and more aggressive and provocative behaviors, each trying to outdo the other. The magnitude of negative behaviors between the parties has a tendency to increase over time. As the conflict continues, each group perceives the other group more negatively, and these perceptions make it more difficult for the escalating conflict to be reversed.

This escalation in negative perceptions between groups that are in conflict occurs in part because conflict leads the groups to develop increasingly strong social identities. These increases in identity are accompanied by the development of even more hostile group norms, which are supported by the group members and their leaders and which sanction or encourage even more negative behaviors toward the outgroup. Conflict also leads to negative stereotypes of the outgroup, increases perceptions of the other groups as homogenous, and potentially even produces deindividuation and dehumanization of the outgroup (Staub, 2011). The conflict also reduces the

amount of interaction among members of the competing groups, which makes it more difficult to change the negative perceptions. The unfortunate outcome of such events is that initially small conflicts may become increasingly hostile until they get out of control. World wars have begun with relatively small encroachments, and duels to the death have been fought over small insults.

Conflict is sometimes realistic, in the sense that the goals of the interacting parties really are incompatible and fixed-sum. At a football game, for instance, only one team can win. And in a business world, there is a limited market share for a product. If one business does better by gaining more customers, then the other competing businesses may well do worse because there are fewer customers left for them. [Realistic group conflict](#) occurs when groups are in competition for objectively scarce resources, such as when two sports teams are vying for a league championship or when the members of different ethnic groups are attempting to find employment in the same factory in a city (Brewer & Campbell, 1976; Jackson, 1993). Conflict results in these conditions because it is easy (and accurate) to blame the difficulties of one's own group on the competition produced by the other group or groups.

Although many situations do create real conflict, some conflicts are more perceived than realistic because (although they may have a core of realistic conflict) they are based on misperceptions of the intentions of others or the nature of the potential rewards. In some cases, although the situation is perceived as conflicting, the benefits gained for one party do not necessarily mean a loss for the other party (the outcomes are actually integrative). For instance, when different supply businesses are working together on a project, each may prefer to supply more, rather than less, of the needed materials. However, the project may be so large that none of the businesses can alone meet the demands. In a case such as this, a compromise is perhaps possible such that the businesses may be able to work together, with each company supplying the products on which it makes a larger profit, therefore satisfying the needs of all the businesses. In this case, the parties may be better off working together than working on their own.

Competition between social groups may also provide social comparison information, which can lead both groups to set higher standards and motivate them to greater achievement. And conflict produces increased [social identity](#) within each of the competing groups. For instance, in the summer camp study, Sherif noted that the boys in the Rattlers and the Eagles developed greater liking for the other members of their own group as well as a greater group identity as the competition between the two groups increased. In situations in which one nation is facing the threat of war with another nation, the resulting identity can be useful in combating the threat, for instance, by mobilizing the citizens to work together effectively and to make sacrifices for the country.

Cooperation: Social Norms That Lead Us to Be Good to Others

Although competition is always a possibility, our concern for others leads most relationships among individuals and among groups to be more benign and favorable. Most people get along with others and generally work together in ways that promote liking, sharing, and [cooperation](#). In these situations, the interacting parties perceive that the gains made by others also improve their own chances of gaining rewards and that their goals are compatible. The parties perceive the situation as integrative and desire to cooperate. The players on a baseball team, for instance, may cooperate with each other—the better any one of them does, the better the team as a whole does. And in cooperative situations, it may in some cases even be beneficial to accept some personal costs (such as bunting a player on first base to second base, even though it means an out for the self) in order to further the goals of the group (by placing the other player in scoring position, thereby benefiting the team).

Because cooperation is evolutionarily useful for human beings, [social norms](#) that help us cooperate have become part of human nature. These norms include principles of morality and social fairness.

Morality

As we have seen in many places in this book, helping others is part of our human nature. And cooperation and helping are found in other animals as well as in humans. For instance, it has been observed that the highest-status chimpanzees in a group do not act selfishly all the time—rather, they typically share food with others and help those who seem to be in need (de Waal, 1996). As humans, our desires to cooperate are guided in part by a set of social norms about morality that forms a basic and important part of our [culture](#). All cultures have [morality beliefs](#)—the set of social norms that describe the principles and ideals, as well as the duties and obligations, that we view as appropriate and that we use to judge the actions of others and to guide our own behavior (Darley & Shultz, 1990; Haidt & Kesebir, 2010).

Researchers have identified two fundamental types of morality—[social conventional morality](#) and [harm-based morality](#) (Turiel, Killen, & Helwig, 1987). [Social conventional morality](#) refers to norms that are seen as appropriate within a culture but that do not involve behaviors that relate to doing good or doing harm toward others. There is a great deal of cultural variation in social conventional morality, and these norms relate to a wide variety of behaviors. Some cultures approve of polygamy and homosexuality, whereas others do not. In some cultures, it is appropriate for men and women to be held to different standards, whereas in other cultures, this is seen as wrong. Even things that seem completely normal to us in the West, such as dancing, eating beef, and allowing men to cook meals for women, are seen in other cultures as immoral.

If these conventions, as well as the fact that they are part of the moral code in these cultures, seem strange to you, rest assured that some of your own conventional beliefs probably seem just as strange to other cultures. Social conventions are in large part arbitrary and are determined by cultures themselves. Furthermore, social conventions change over time. Not so long ago in the United States, it was wrong for Blacks and Whites to marry, and yet that convention has now changed for the better. And soon it seems as if many states will fully accept gay marriages, a policy that seemed unheard of even a few

years ago.

On the other hand, some of the most important and fundamental moral principles seem to be universally held by all people in all cultures and do not change over time. It has been found that starting at about age 10, children in most cultures come to a belief about harm-based morality—that harming others, either physically or by violating their rights, is wrong (Helwig & Turiel, 2002). These fundamental and universal principles of morality involve rights, freedom, equality, and cooperation, and virtually all cultures have a form of the golden rule, which proscribes how we should treat other people (as we would have them treat us).

Morals are held and agreed to by all members of the culture. In most cases, morals are upheld through rules, laws, and other types of sanctions for their transgression. We give rewards to people who express our preferred morality, for instance, in the form of prizes, honors, and awards, and we punish those who violate our moral standards.

Morality has both a cognitive and an emotional component. Some judgments just feel wrong, even if we cannot put our finger on exactly why that is. For instance, I think you'd probably agree that it is morally wrong to kiss your sister or brother on the lips, although at a cognitive level, it's difficult to say exactly why it's wrong. Is it wrong to kill someone if doing so saves lives? Most people agree that they should flip the switch to kill the single individual in the following scenario:

A runaway trolley is headed for five people who will all be killed. The only way to save them is to hit a switch that will turn the trolley onto a different track where it will kill one person instead of five.

And yet even when morality seems cognitive, our emotions come into play. Although most people agree that the decision to kill the one person is rational, they would have a hard time actually doing it—harm-based morality tells us we

should not kill.

The Moral Roots of Liberals and Conservatives

Loading...

Social Fairness

An essential part of morality involves determining what is “right” or “fair” in social interaction. We want things to be fair, we try to be fair ourselves, and we react negatively when we see things that are unfair. And we determine what is or is not fair by relying on another set of social norms, appropriately called [social fairness norms](#), which are beliefs about how people should be treated fairly (Tyler & Lind, 2001; Tyler & Smith, 1998).

The preference for fairness has been proposed to be a basic human impulse (Tyler & Blader, 2000), and when we perceive unfairness, we also experience negative emotional responses in brain regions associated with reward and punishment (Tabibnia, Satpute, & Lieberman, 2008). The experience of

unfairness is associated with negative emotions, including anger and contempt, whereas fairness is associated with positive emotions.

One type of social fairness, known as [distributive fairness](#), refers to our judgments about whether or not a party is receiving a fair share of the available rewards. [Distributive fairness](#) is based on our perceptions of equity—the belief that we should each receive for our work a share proportionate to our contributions. If you and I work equally hard on a project, we should get the same grade on it. But if I work harder than you do, then I should get a better grade. Things seem fair and just when we see that these balances are occurring, but they seem unfair and unjust when they do not seem to be.

A second type of fairness doesn't involve the outcomes of the work itself but rather our perceptions of the methods used to assign those outcomes. [Procedural fairness](#) refers to beliefs about the fairness (or unfairness) of the procedures used to distribute available rewards among parties (Schroeder, Steele, Woodell, & Bernbenek, 2003). Procedural fairness is important because in some cases we may not know what the outcomes are, but we may nevertheless feel that things are fair because we believe that the process used to determine the outcomes is fair. For instance, we may not know how much tax other people are paying, but we feel that the system itself is fair, and thus most of us endorse the idea of paying taxes (indeed, almost everyone in the United States pays their taxes). We do so not only out of respect for the laws that require us to but also because the procedure seems right and proper, part of the social structure of our society.

We believe in the importance of fairness in part because if we did not, then we would be forced to accept the fact that life is unpredictable and that negative things can occur to us at any time. Believing in fairness allows us to feel better because we can believe that we get what we deserve and deserve what we get. These beliefs allow us to maintain control over our worlds. To believe that those who work hard are not rewarded and that accidents happen to good people forces us to concede that we too are vulnerable.

Because we believe so strongly in fairness, and yet the world is not always just, we may distort our perceptions of the world to allow us to see it as more fair than it really is. One way to create a “just world” is to reinterpret behaviors and outcomes so that the events seem to be fair. Indeed Melvin Lerner and his colleagues (Lerner, 1980) found one way that people do this is by [blaming the victim](#): Interpreting the negative outcomes that occur to others internally so that it seems that they deserved them. When we see that bad things have happened to other people, we tend to blame the people for them, even if they are not at fault. Thus we may believe that poor people deserve to be poor because they are lazy, that crime victims deserve to be victims because they were careless, and that people with AIDS deserve their illness. In fact, the more threatened we feel by an apparent unfairness, the greater is our need to protect ourselves from the dreadful implication that it could happen to us, and the more we disparage the victim.

Reactions to Unfairness

Although everyone believes that things should be fair, doing so is a lot easier for those of us for whom things have worked out well. If we have high status, we will generally be content with our analysis of the situation because it indicates that we deserve what we got. We are likely to think, “I must have a good education, a good job, and plenty of money because I worked hard for it and deserve it.” In these cases, the reality supports our desires for [self-concern](#), and there is no psychological dilemma posed. On the other hand, people with low status must reconcile their low status with their perceptions of fairness.

Although they do not necessarily feel good about it, individuals who have low status may nevertheless accept the existing status hierarchy, deciding that they deserve what little they have. This is particularly likely if these low-status individuals accept the [procedural fairness](#) of the system. People who believe that the system is fair and that the members of higher-status groups are trustworthy and respectful frequently accept their position, even if it is one of low status (Tyler, Degoe, & Smith, 1996). In all societies, some individuals have lower status than others, and the members of low-status groups may

perceive that these differences because they are an essential part of the society, are acceptable. The acceptance of one's own low status as part of the proper and normal functioning of society is known as [false consciousness](#) (Jost & Banaji, 1994; Major, 1994). In fact, people who have lower social status and who thus should be most likely to reject the existing status hierarchy are often the most accepting of it (Jost, Pelham, Sheldon, & Sullivan, 2003).

But what about people who have not succeeded, who have low social status, and yet who also do not accept the procedural fairness of the system? How do they respond to the situation that seems so unfair? One approach is to try to gain status, for instance, by leaving the low-status group to which they currently belong. Individuals who attempt to improve their social status by moving to a new, higher-status group must give up their social identity with the original group and then increasingly direct their communication and behavior toward the higher-status groups in the hope of being able to join them.

Although it represents the most direct method of change, leaving one group for another is not always desirable for the individual or effective if it is attempted. For one, if individuals are already highly identified with the low-status group, they may not wish to leave it despite the fact that it is low status. Doing so would sacrifice an important social identity, and it may be difficult to generate a new one with the new group (Ellemers, Spears, & Doosje, 1997; Spears, Doosje, & Ellemers, 1997). In addition, an attempt to leave the group is a likely response to low status only if the person perceives that the change is possible. In some situations, group memberships are constrained by physical appearance (such as when the low status is a result of one's race or ethnicity) or cultural norms (such as in a caste system in which change is not allowed by social custom). And there may also be individual constraints on the possibility of mobility—if the individual feels that he or she does not have the skills or ability to make the move, he or she may be unlikely to attempt doing so.

When it does not seem possible to leave one's low-status group, the individual may decide instead to use a [social creativity](#) strategy. [Social creativity](#) refers to the use of strategies that allow members of low-status groups to perceive their

group as better than other groups, at least on some dimensions, which allows them to gain some positive social identity (Derks, van Laar, & Ellemers, 2007). In the United States, for example, Blacks, who are frequently the target of negative stereotypes, prejudices, and [discrimination](#), may react to these negative outcomes by focusing on more positive aspects of their group membership. The idea is that their cultural background becomes a positive, rather than a negative, aspect of their personality—"Black is Beautiful!" is one example.

Social creativity frequently takes the form of finding alternative characteristics that help the group excel. For example, the students at a college that does not have a particularly good academic standing may look to the superior performance of their sports teams as a way of creating positive self-perceptions and social identity. Although the sports team performance may be a less important dimension than academic performance overall, it does provide at least some positive feelings. Alternatively, the members of the low-status group might regain identity by perceiving their group as very cohesive or homogenous, emphasizing group strength as a positive characteristic.

When individual mobility is not possible, group members may consider mobilizing their group using [collective action](#). [Collective action](#) refers to the attempts on the part of one group to change the social status hierarchy by improving the status of their own group relative to others. This might occur through peaceful methods, such as lobbying for new laws requiring more equal opportunity or for affirmative action programs, or it may involve resorts to [violence](#), such as the 1960s race riots in the United States or the recent uprisings in Middle Eastern countries (Ellemers & Barreto, 2009; Leonard, Moons, Mackie, & Smith, 2011; Levine, Taylor, & Best, 2011).

Collective action is more likely to occur when there is a perception on the part of the group that their low status is undeserved and caused by the actions of the higher-status group, when communication among the people in the low-status group allows them to coordinate their efforts, and when there is strong leadership to help define an ideology, organize the group, and formulate a

program for action. Taking part in collective action—for instance, by joining feminist, or civil rights, or the “Occupy Wall Street” movements in the United States—is a method of maintaining and increasing one’s group identity and attempting to change the current social structure.

Social Psychology in the Public Interest: System Justification

We have argued throughout this book that people have a strong desire to feel good about themselves and the people they care about, and we have seen much evidence to support this idea. Most people believe that they and their own groups are important, valued, competent, and generally “better than average.” And most people endorse social policies that favor themselves and the groups to which they belong (Bobo, 1983; Sidanius & Pratto, 1999).

If this is the case, then why do people who are of lower socioeconomic status so often support political policies that tax the poor more highly than they tax the rich and that support unequal income distributions that do not favor them? In short, why do people engage in system justification, even when the current state of affairs does not benefit them personally? Social psychologists have provided a number of potential explanations for this puzzling phenomenon.

One factor is that our perceptions of fairness or unfairness are not based on our objective position within the society but rather are more based on our comparison of our own status relative to the other people around us. For instance, poor people in the United States may not perceive that they have lower status because they compare their current state of affairs not with rich people but with the people who they are most likely to see every day—other poor people.

This explanation is supported by the fact that factors that increase the

likelihood that lower-status individuals will compare themselves with higher-status people tend to reduce system justification beliefs, decrease life satisfaction, and lead to collective action. For instance, the civil rights riots of the 1960s occurred after Blacks had made many gains in the United States. At this time, they may have tended to reject the existing status system because they began to compare themselves with higher-status Whites rather than with other low-status Blacks, and this upward comparison made their relatively lower status seem more illegitimate and unfair (Gurr, 1970).

A second explanation is based on the principles of procedural fairness. Our perceptions of fairness and our satisfaction with our own lives are determined in large part by the culture in which we live. In the United States, the culture provides a strong belief in fairness. Most people believe in the procedural fairness of the system itself and thus are willing to believe that systems and authorities are correct and proper and that inequality among groups and individuals is legitimate and even necessary. Furthermore, because believing otherwise would be highly threatening to the self-concept, poor people may be even more likely to believe in the correctness of these inequalities than are those of higher status (Jost, 2011; van der Toorn, Tyler, & Jost, 2011).

To test this hypothesis, John Jost and his colleagues (Jost, Pelham, Sheldon, & Sullivan, 2003) asked over 2,500 U.S. citizens the following question:

Some people earn a lot of money while others do not earn very much at all. In order to get people to work hard, do you think large differences in pay are

absolutely necessary,
probably necessary,
probably not necessary,
definitely not necessary.

As predicted by the idea that to believe otherwise is to accept that the social situation is unfair, Jost et al. found that poorer people were significantly more likely to think that large differences in pay were necessary and proper (responding “absolutely necessary” or “probably necessary”) than did wealthier people (see the following figure). You can see that social psychological principles—in this case, the idea of system justification—can be used to explain what otherwise would seem to be quite unexpected phenomena.

Figure 10.1



Poorer respondents reported finding the income differential between rich and poor more acceptable than did richer participants. Data are from Jost, Pelham, Sheldon, and Sullivan (2003).

Key Takeaways

- The individual goals of self-concern and [other-concern](#) help explain tendencies to cooperate or compete with others.
- Both competition and cooperation are common and useful reactions to social interaction dilemmas.
- The solutions to social dilemmas are more favorable when the outcomes are integrative rather than fixed-sum.
- Conflict is sometimes realistic, in the sense that the goals of the

interacting parties really are incompatible. But in many cases, conflicts are more perceived than realistic.

- Our reactions to conflict are influenced by harm-based morality beliefs and social fairness norms.
- Individuals who have low status may nevertheless accept the existing status hierarchy, deciding that they deserve what little they have, a phenomenon known as false consciousness. Individuals with low status who do not accept the procedural fairness of the system may use social creativity strategies or they may resort to collective action.

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10.3 Strategies for Producing Cooperation

Learning Objectives

1. Outline the variables that increase and decrease competition.
2. Summarize the principles of negotiation, mediation, and arbitration.

When we are faced with situations in which conflict is occurring or has the potential to develop, it will be useful if we are aware of the techniques that will help us best deal with it. We may want to help two roommates realize that they will be better off taking the cooperative choice—by contributing to the household chores—and we may desire to try to convince people to take public transportation rather than their own car because doing so is better for the environment and in the end better for everyone. The problem, of course, is that although the parties involved may well realize the potential costs of continuing to behave selfishly or competitively, the [social situation](#) nevertheless provides a strong motivation to continue to take the selfish choice.

It is important to attempt to determine appropriate ways to encourage more responsible use of social resources because individualistic consumption of these supplies will make them disappear faster and may have overall negative effects on human beings (Oskamp & Schultz, 2006).

It should be kept in mind that although social dilemmas are arranged such that competition is a likely outcome, they do not always end in collective disaster. Historical evidence shows, for example, that most of the commons grounds in England and other countries were, in fact, managed very well by local



communities and were usually not overgrazed. Many British commons exist to this day. And even the Cold War between the United States and the Soviet Union, which inspired so much research into social dilemmas, had a peaceful end. In addition, findings from experimental [social dilemma](#) research involving repeated interactions between strangers suggest that the vast majority of interactions result in mutual [cooperation](#) (De Cremer & Van Vugt, 1999).

Although the solutions are not simple, by examining the many studies that have focused on cooperation and conflict in the real world and in the lab, we can draw some conclusions about the specific characteristics that determine when and whether people cooperate or compete. These factors include the type of task, such as its rules and regulations; our perceptions about the task; the norms that are operating in the current situation; and the type and amount of communication among the parties. Furthermore, we can use approaches such as [negotiation](#), [arbitration](#), and [mediation](#) to help parties that are in competition come to agreement.

Task Characteristics and Perceptions

One factor that determines whether individuals cooperate or compete is the nature of the situation itself. The characteristics of some social dilemmas lead them to produce a lot of competitive responses, whereas others are arranged to elicit more cooperation. Thus one way to reduce conflict, when the approach is possible, is to change the rules of the task to reinforce more cooperation (Samuelson, Messick, Rutte, & Wilke, 1984). A class in which the instructor has decided ahead of time that only 10% of the students can get A's will be likely to produce a competitive orientation among the students. On the other hand, if the instructor says that he or she would be quite happy to assign each student an A (assuming each individual deserves one!), a more cooperative orientation is likely to ensue. In general, cooperation will increase when it is more rewarded, and competition will increase when it is rewarded (Komorita & Parks, 1994).

If societies really desire to maintain the [public goods](#) for their citizens, they will

work to maintain them through incentives—for instance, by creating taxes such that each person is required to contribute his or her fair share to support them. A city or a state may add a carpool lane to the roadways, making it more desirable to commute with others and thereby help keep the freeways unclogged. Similarly, in terms of harvesting dilemmas, rules can be implemented that regulate the amount of the public good that can be taken by each individual member of the society. In a water crisis, rationing can be implemented in which individuals are allowed to use only a certain amount of water each month, thereby protecting the supply for all, or fishing limits can be imposed to maintain populations. People form governments in part to make sure that all individuals in the community contribute to public goods and obey the rules of cooperation. Leaders may also be elected by the group to help convince the members of the society that it is important just to follow the rules, thereby increasing cooperation (Tyler & Lind, 1992).

The Important Role of Communication

When communication between the parties involved in a conflict is nonexistent, or when it is hostile or negative in tone, disagreements frequently result in escalation of negative feelings and lead to conflict. In other cases, when communication is more open and positive, the parties in potential conflict are more likely to be able to deal with each other effectively, with a result that produces compromise and cooperation (Balliet, 2010).

Communication has a number of benefits, each of which improves the likelihood of cooperation. For one, communication allows individuals to tell others how they are planning to behave and what they are currently contributing to the group effort, which helps the group learn about the motives and behaviors of the others and helps the group develop norms for cooperation. Communication has a positive effect because it increases the expectation that the others will act cooperatively and also reduces the potential of being a “sucker” to the free riding of others. Thus communication allows the parties to develop a sense of trust (Messick & Brewer, 1983).

Once cooperative norms are in place, they can improve the possibilities for long-term cooperation because they produce a public [commitment](#) on the part of the parties to cooperate as well as an internalized obligation to honor those commitments (Kerr, Garst, Lewandowski, & Harris, 1997). In fact, Norbert Kerr and his colleagues (Kerr, Ganst, Lewandowski, & Harris, 1997; Kerr & Kaufman-Gilliland, 1994) have found that group discussion commits group members to act cooperatively to such an extent that it is not always necessary to monitor their behavior; once the group members have shared their intentions to cooperate, they will continue to do so because of a private, internalized commitment to it.

Communication can also allow the people working together to plan what they should do and therefore can help them better coordinate their efforts. For instance, in a resource dilemma game, discussion allows the group to monitor their withdrawals from the public good so that the pool is not depleted (Liebrand, 1984). And if only a certain number of individuals need to contribute in a [contributions dilemma](#) in order for the public good to be maintained, communication may allow the group members to set up a system that ensures that this many, but not more, contribute in any given session.

Finally, communication may also help people realize the advantages, over the long term, of cooperating. If, as a result of communication, the individuals learn that the others are actually behaving cooperatively (something that might not have been apparent given prior misperceptions that make us overestimate the extent to which others are competing), this might increase the motivation to cooperate oneself. Alternatively, [learning](#) that others are behaving competitively and thus threatening the resources may help make it clear to all the parties that increased cooperation is essential (Jorgenson & Papciak, 1981).

Perhaps the most important benefit of communication is the potential of learning that the goals of the parties involved in the conflict are not always incompatible (Thompson & Hrebec, 1996; Thompson, 1991). A major barrier to increasing cooperation is that individuals expect both that situations are arranged such that they are fixed-sum and that others will act competitively to

attempt to gain a greater share of the outcomes. Neither of these assumptions is necessarily true, however, and thus one potential benefit of communication is that the parties come to see the situation more accurately.

One example of a situation in which communication was successful is the meeting held at Camp David, Maryland, in 1978 between the delegates of Egypt and Israel. Both sides sat down together with then-U.S. President Carter to attempt to reach an accord over the fate of the Sinai Peninsula, which Israel had occupied for many years. Initially, neither side would budge, and attempts to divide the land in half were opposed by both sides. It appeared that there was a fixed-sum situation in which land was the important factor, and neither wanted to give it up. Over the course of discussion, communication prevailed. It became clear that what Egypt really wanted out of the deal was sovereignty over lands that were perceived as historically part of Egypt. On the other hand, what Israel valued the most was security. The outcome of the discussion was that Israel eventually agreed to return the land to Egypt in exchange for a demilitarized zone and the establishment of new Israeli air bases. Despite the initial perceptions, the situation turned out to be integrative rather than fixed-sum, and both sides were able to get what they wanted.

Laboratory studies have also demonstrated the benefits of communication. Leigh Thompson (1991) found that groups in negotiation did not always effectively communicate, but those that did were better able to reach compromises that benefited both parties. Although the parties came to the situation expecting the game to be a fixed-sum situation, communication allowed them to learn that the situation was actually integrative—the parties had different needs that allowed them to achieve a mutually beneficial solution. Interestingly, Thompson found that it did not matter whether both parties involved in the dispute were instructed to communicate or if the communication came in the form of questions from only one of the two participants. In both cases, the parties who communicated viewed the other's perspectives more accurately, and the result was better outcomes. Communication will not improve cooperation, however, if it is based on communicating hostility rather than working toward cooperation. In studies in

which individuals played the trucking game, for instance, the communication was generally in the form of threats and did not reduce conflict (McClintock, Stech, & Keil, 1983).

The Tit-for-Tat Strategy

In social dilemma games that are run over a number of trials, various strategies can be used by the parties involved. But which is the best strategy to use in order to promote cooperation? One simple strategy that has been found to be effective in such situations is known as *tit-for-tat*. The [tit-for-tat strategy](#) involves *initially making a cooperative choice and then waiting to see what the other individuals do*. If it turns out that they also make the cooperative choice (or if most of them do), then the individual again makes a cooperative choice. On the other hand, if the other group members compete, then the individual again matches this behavior by competing. This process continues such that the individual always does what the others have done on the trial before.

Computers have been used to simulate the behavior of individuals who use the tit-for-tat strategy over a series of interactions in comparison with other approaches for determining whether to cooperate or compete on each trial. The tit-for-tat strategy has been found to work better than straight cooperation or other types of strategies in producing cooperation from the parties (Axelrod, 2005; Fischer & Suleiman, 2004; Van Lange & Visser, 1999).

The tit-for-tat strategy seems to be so effective because, first, it is “nice” in the sense that the individual first cooperates and signals a willingness to cooperate. Second, the strategy seems to be successful because, since it is relatively simple and easy to understand, others can clearly see how the choices are being determined. Furthermore, the approach sends a clear message that competitive choices on the part of the other will not be tolerated and that cooperation will always be reciprocated. The other party cannot take advantage of a person who is using tit-for-tat on more than one trial because if they try to do so, the result will always be retaliation in the form of a competitive choice on the next trial.

Indeed, it has been found that having people play against a partner who uses the tit-for-tat strategy can help them learn to be more cooperative, particularly once they become aware what the strategy is and how it is being used (Sheldon, 1999). The tit-for-tat strategy seems particularly effective because it balances self-concerned and other-concerned responses in an easy-to-understand way.

Despite the fact that it generally works better than most other strategies, tit-for-tat is not perfect. One problem is that because people are more likely to behave competitively than cooperatively, tit-for-tat is more likely to lead opponents to match noncooperative responses than to follow cooperation with cooperation, and thus tit-for-tat may in some cases produce a spiral of conflict (Kelley & Stahelski, 1970). This is particularly likely if the opposing party never makes a cooperative choice, and thus the party using tit-for-tat never gets a chance to play cooperatively after the first round, or in cases in which there is some noise in the system and the responses given by the parties are not always perceived accurately. Variations of the tit-for-tat strategy in which the individual acts more cooperatively than demanded by the strategy (e.g., by giving some extra cooperative trials in the beginning or being extra cooperative on other trials) have been found to be helpful in this regard, although they do allow the opponent to exploit the side who is playing tit-for-tat.

Key Takeaways

- The social situation has an important influence on choices to cooperate or compete, and it is important to understand these influences.
- Decisions about whether to cooperate or compete are also influenced by expectations about the likely behavior of others.
- Communication has a number of benefits, each of which improves the likelihood of cooperation.

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11.0 Working Groups: Performance and Decision Making

Groupthink and Presidential Decision Making

In 2003, President George W. Bush, in his State of the Union address, made specific claims about Iraq's weapons of mass destruction. The president claimed that there was evidence for "500 tons of sarin, mustard and VX nerve agent; mobile biological weapons labs" and "a design for a nuclear weapon."

But none of this was true, and in 2004, after the war was started, Bush himself called for an investigation of intelligence failures about such weapons preceding the invasion of Iraq.

Many Americans were surprised at the vast failure of intelligence that led the United States into war. In fact, Bush's decision to go to war based on erroneous facts is part of a long tradition of decision making in the White House.

Psychologist Irving Janis popularized the term [groupthink](#) in the 1970s to describe the dynamic that afflicted the Kennedy administration when the president and a close-knit band of advisers authorized the ill-fated Bay of Pigs invasion in Cuba in 1961. The president's view was that the Cuban people would greet the American-backed invaders as liberators who would



replace Castro's dictatorship with democracy. In fact, no Cubans greeted the American-backed force as liberators, and Cuba rapidly defeated the invaders.

The reasons for the erroneous consensus are easy to understand, at least in hindsight. Kennedy and his advisers largely relied on testimony from Cuban exiles, coupled with a selective reading of available intelligence. As is natural, the president and his advisers searched for information to support their point of view. Those supporting the group's views were invited into the discussion. In contrast, dissenters were seen as not being team players and had difficulty in getting a hearing. Some dissenters feared to speak loudly, wanting to maintain political influence. As the top team became more selective in gathering information, the bias of information that reached the president became ever more pronounced.

A few years later, the administration of President Lyndon Johnson became mired in the Vietnam War. The historical record shows that once again, few voices at the very top levels of the administration gave the president the information he needed to make unbiased decisions. Johnson was frequently told that the United States was winning the hearts and minds of the Vietnamese but was rarely informed that most Vietnamese viewed the Americans as occupiers, not liberators. The result was another presidential example of groupthink, with the president repeatedly surprised by military failures.

How could a president, a generation after the debacles at the Bay of Pigs and in Vietnam, once again fall prey to the well-documented problem of groupthink? The answer, in the language of former Treasury Secretary Paul O'Neill, is that Vice President Dick Cheney and his allies formed "a praetorian guard that encircled the president" to block out views they did not like. Unfortunately, filtering dissent is associated with more famous presidential failures than spectacular successes.

Source: Levine, D. I. (2004, February 5). [Groupthink](#) and Iraq. *San*

Francisco Chronicle. Retrieved from <http://www.sfgate.com/cgi-bin/article.cgi?file=/chronicle/archive/2004/02/05/EDGV34OCEP1.DTL>.

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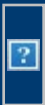
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Appendix A: The Behaviorist Perspective

Our Knowledge Accumulates as a Result of Learning

People have many memories about [their](#) experiences with other people, and [they](#) use this information to make predictions about what people will do in the future. This knowledge is gained through [learning](#). The study of learning is closely associated with the **behaviorist** school of psychology, which includes the psychologists John B. **Watson** and B. F. **Skinner**. For behaviorists, the fundamental aspect of learning is the process of **conditioning**—*the ability to connect stimuli (the changes that occur in the environment) with responses (behaviors or other actions)*. The behaviorists described two types of conditioning that are particularly important in [behaviorism](#): [operant conditioning](#) (also known as *instrumental conditioning*) and [classical conditioning](#) (also known as *respondent conditioning*). When applied to human behavior, these two processes are frequently called, respectively, *operant learning* and *associational learning*.

Operant Learning

If a child touches a hot radiator, she quickly learns that the radiator is dangerous and is not likely to touch it again. If we have unpleasant experiences with people from a certain state or country, or a positive relationship with a person who has blonde hair or green eyes, we may develop negative or positive attitudes about people with these particular characteristics and attempt to



reduce or increase our interactions with them. These changes in our understanding of our environments represent operant learning—*the principle that we learn new information as a result of the **consequences** of our behavior*. According to operant learning principles, experiences that are followed by positive emotions (reinforcements or rewards) are likely to be repeated, whereas experiences that are followed by negative emotions (punishments) are less likely to be repeated. With **operant conditioning**, the person learns from the **consequences** of his or her own actions.

Although its principles are very simple, operant learning is an important form of human learning. Operant learning occurs when a schoolroom bully threatens his classmates because doing so allows him to get his way, when a child gets good grades because her parents threaten to punish her if she doesn't, when we begin to like someone who smiles at us frequently, and in hundreds of other cases every day.

The application of operant learning to [social psychology](#) is straightforward: How do we know which behaviors are most appropriate in a [social situation](#)? We learn, in part, because we have positively reinforced for engaging in the appropriate ones and negatively reinforced for engaging in the inappropriate ones. It does not take us long to learn that Margette is more likely to give us the kiss we have been hoping for if we are nice to her or that our children are more likely to share their toys with others if we reward them for doing it. Operant learning has even been used to explain why some people choose to become criminals. According to this approach, criminal behavior is determined by the reinforcements and punishments that the individual experiences (e.g., with peers and with parents) as a result of his or her behavior (Akers, 1998).

Application of Classical Conditioning or Associational Learning

Associational learning *occurs when an object or event comes to be associated with a natural response, such as an automatic behavior or a positive or*

negative emotion. If you've ever become hungry when you drive by one of your favorite pizza stores, it is probably because the sight of the pizzeria has become associated with your experiences of enjoying the pizzas. We may enjoy smoking cigarettes, drinking coffee, and eating not only because they give us pleasure themselves but also because they have been associated with pleasant social experiences in the past.

Associational learning also influences our knowledge and judgments about other people. For instance, research has shown that people view men and women who are seen alongside other people who are attractive, or who are said to have attractive girlfriends or boyfriends, more favorably than they do the same people who are seen alongside more average-looking others (Sigall & Landy, 1973). This liking is due to associational learning—we have positive feelings toward the people simply because those people are associated with the positive features of the attractive others.

Associational learning has long been, and continues to be, an effective tool in marketing and advertising (Hawkins, Best, & Coney, 1998). The general idea is to create an advertisement that has positive features so that it creates enjoyment in the person exposed to it. Because the product being advertised is mentioned in the ad, it becomes associated with the positive feelings that the ad creates. In the end, if everything has gone well, seeing the product online or in a store will then create a positive response in the buyer, leading him or her to be more likely to purchase the product.

A similar strategy is used by corporations that sponsor teams or events. For instance, if people enjoy watching a college basketball team playing basketball, and if that team is sponsored by a product, such as Pepsi, then people may end up experiencing positive feelings when they view a can of Pepsi. Of course, the sponsor wants to sponsor only good teams and good athletes because these create more pleasurable responses.

Advertisers use a variety of techniques to create positive advertisements, including enjoyable music, cute babies, attractive models, and funny

spokespeople. In one study, Gorn (1982) showed research participants pictures of writing pens of different colors, but paired one of the pens with pleasant music and another with unpleasant music. When given a choice as a free gift, more people chose the pen that had been associated with the pleasant music. In another study, Schemer, Matthes, Wirth, and Textor (2008) found that people were more interested in products that had been embedded in music videos of artists that they liked and less likely to be interested when the products were in videos featuring artists that they did not like.

Another type of ad that is based on principles of **classical conditioning** is one that associates fear with the use of a product or behavior, such as those that show pictures of deadly automobile accidents to encourage seatbelt use or [images](#) of lung cancer surgery to discourage smoking. These ads have also been found to be effective (Das, de Wit, & Stroebe, 2003; Perloff, 2003; Witte & Allen, 2000), largely because of conditioning.

Recently, the U.S. government created new negative and graphic images to place on cigarette packs in order to increase an association between negative responses and cigarettes. The idea is that when we see a cigarette and the fear of dying is associated with it, we will be less likely to light up.

Taken together then, research studies provide ample [evidence](#) of the utility of associational learning in advertising, in ads using positive stimuli and in those using negative stimuli. This does not mean, however, that we are always influenced by these ads. The likelihood that associational learning will be successful is greater when we do not know much about the products, where the differences between products are relatively minor, and when we do not think too carefully about the choices (Schemer [et al.](#), 2008).

Associational learning is also implicated in the development of unfair and unjustified racial prejudices. We may dislike people from certain racial or ethnic groups because we frequently see them portrayed in the media as associated with [violence](#), drug use, or terrorism. And we may avoid people with certain physical characteristics simply because they remind us of other people

we do not like.

Lewicki (1985) conducted research that demonstrated the influence of associational learning and how quickly and easily such learning can happen. In his experiment, high school students first had a brief interaction with a female experimenter who had short hair and wore glasses. The study was set up so that the students had to ask the experimenter a question, and (according to random assignment) the experimenter responded in either a negative way or a neutral way toward the participants. Then the students were told to go into a second room in which two experimenters were present and to approach either one of them. The researchers arranged it so that one of the two experimenters looked a lot like the original experimenter and the other one did not (she had longer hair and did not wear glasses). The students were significantly more likely to avoid the experimenter who looked like the original experimenter when that experimenter had been negative to them than when she had treated them neutrally. As a result of associational learning, the negative behavior of the first experimenter unfairly “rubbed off” onto the second.

Donal Carlston and his colleagues (Mae & Carlston, 2005; Skowronski, Carlston, Mae, & Crawford, 1998) discovered still another way that associational learning can occur: When we say good or bad things about another person in public, the people who hear us say these things associate those characteristics with us, such that they like people who say positive things and dislike people who say negative things. The moral is clear—associational learning is powerful, so be careful what you do and say.

← Appendices

Appendix B: Bandura’s Obs...→

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Appendix B: Bandura's Observational Learning

In addition to operant and associational [learning](#), people learn by observing the behavior of others. This is known as observational learning (modeling). To demonstrate the importance of observational learning in children, Bandura and Walters (1959) made a film of a young woman beating up a bobo doll—an inflatable balloon with a weight in the bottom that makes it bob back up when you knock it down. The woman violently hit the doll, shouting “sockeroo!” She also kicked it, sat on it, and hit it with a hammer.

Bandura showed his film to groups of nursery school children and then let them play in a room in which there were some really fun toys. To create some frustration in the children, Bandura let the children play with the fun toys for only a couple of minutes before taking them away. Then Bandura gave the children a chance to play with the bobo doll. You probably won't be surprised to hear that many of the children imitated the young woman in the film. [They](#) punched the bobo doll, shouted “sockeroo,” and hit the doll with a hammer.

For some of the children, the female model was shown being rewarded for engaging in the behavior, and for other children, she was punished. In support of the principles of operant learning, Bandura's study found that the children were more likely to be aggressive when the model had been rewarded for the behavior and were less likely to be so when the model had been punished. But even the children who did not see the model receive any reward nevertheless imitated the behavior to some extent. One of the major contributions of this study is the demonstration that children learned new types of aggressive behaviors simply by observing and imitating others.



Observational learning is involved in much of our learning about our social worlds. Observational learning teaches us that Hank is friendly, that Joanna is selfish, and that Frankie has a crush on Malik. In other cases, our knowledge comes more indirectly, from what we read in books or see on TV, or from what our friends [tell](#) us, for instance.

Observational learning is useful because it allows people to learn without having to actually engage in what might be a risky behavior. As Bandura put it, the prospects for [human] survival would be slim indeed if one could learn only by suffering the consequences of trial and error. For this reason, one does not teach children to swim, adolescents to drive automobiles, and novice medical students to perform surgery by having them discover the appropriate behavior through the consequences of [their](#) successes and failures. The more costly and hazardous the possible mistakes, the heavier is the reliance on observational learning from competent learners. (1977, p. 12).

Bandura considered observational learning to be a fundamental determinant of all social behavior and argued that it is most likely to lead to learning when people pay attention to the behavior of models and are highly motivated to imitate the models.

← Appendix A: The Behaviorist...

Appendix C: Important Char...→

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Appendix C: Important Characteristics of Effective Leaders

- Relationship-oriented leaders – motivated primarily by close personal relationships with others
- Task-oriented leaders – motivated primarily by getting the job done (Ayman, Chemers, & Fiedler, 1995)

Please note that most effective leaders excel at both relationships and getting tasks completed.

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← Appendix B: Bandura’s Obs...

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Chapter 7

There are some scenes and language that are not appropriate for children and may be disturbing to some. Thus, discretion is advised. ABC News' replication

of Milgram's shocking study (27+ min. – 2010?)

<https://www.youtube.com/watch?v=JnYU6wlBF4> Stop promptly about 18:30? 20.5 – 27+ min.: What were persons who did Not obey like? McDonald's employee stripping, effect of dissent or minority influence, and ethics The Stanford Prison Study (14- min. video) <http://www.youtube.com/watch?v=sZwfNs1pqGo&feature=share&list=LPI-UAXPHeiU>

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Chapter 8: Liking and Loving

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8.1 Initial Attraction

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9.1 Understanding Altruism: Self and Other Concerns

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Chapter 11 Group Processes References

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Chapter 12: Stereotypes, Prejudice, and Discrimination

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11.1 Group Process: The Pluses and Minuses of Working Together

Learning Objectives

1. Describe the situations under which social facilitation and social inhibition might occur, and review the theories that have been used to explain these processes.
2. Explain the influence of each of these concepts on group performance: groupthink, information sharing, brainstorming, and group polarization.

When important decisions need to be made, or when tasks need to be performed quickly or effectively, we frequently create groups to accomplish them. Many people believe that groups are effective for making decisions and performing other tasks (Nijstad, Stroebe, & Lodewijkx, 2006), and such a belief seems commonsensical. After all, because groups have many members, they will also have more resources and thus more ability to efficiently perform tasks and make good decisions. However, although groups sometimes do perform better than individuals, this outcome is not guaranteed. Let's consider some of the many variables that can influence group performance.

Social Facilitation and Social Inhibition



In one of the earliest social psychological studies, Norman Triplett (1898) investigated how bicycle racers were influenced by the [social situation](#) in which

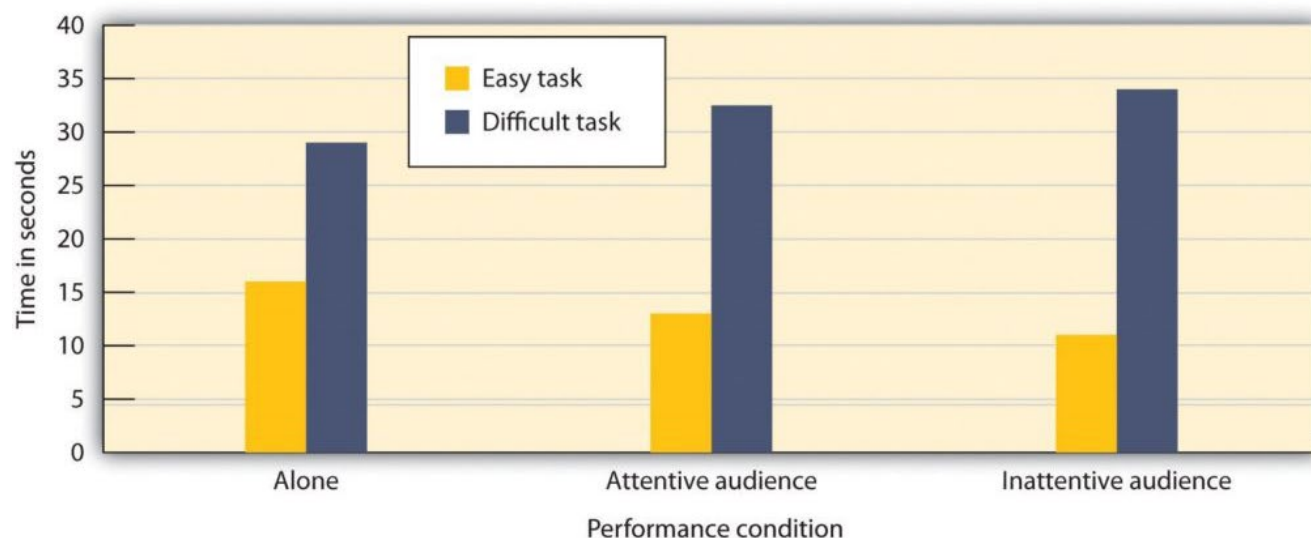
they raced. Triplett found something very interesting—the racers who were competing with other bicyclers on the same track rode significantly faster than bicyclers who were racing alone, against the clock. This led Triplett to hypothesize that people perform tasks better when the social context includes other people than when they do the tasks alone. Subsequent findings validated Triplett’s results, and other experiments have shown that the presence of others can increase performance on many types of tasks, including jogging, shooting pool, lifting weights, and working on math and computer problems (Geen, 1989; Guerin, 1983; Robinson-Staveley & Cooper, 1990; Strube, Miles, & Finch, 1981). *The tendency to perform tasks better or faster in the presence of others* is known as [social facilitation](#).

Although people sometimes perform better when they are in groups than they do alone, the situation is not that simple. Perhaps you can remember a time when you found that a task you could perform well alone (e.g., giving a public presentation, playing the piano, shooting basketball free throws) was not performed as well when you tried it with, or in front of, others. Thus it seems that the conclusion that being with others increases performance cannot be entirely true and that sometimes the presence of others can worsen our performance. *The tendency to perform tasks more poorly or slower in the presence of others* is known as [social inhibition](#).

To study social facilitation and social inhibition, Hazel Markus (1978) gave research participants both an easy task (putting on and tying their shoes) and an unfamiliar and thus more difficult task (putting on and tying a lab coat that tied in the back). The research participants were asked to perform both tasks in one of three social situations—alone, with a confederate present who was watching them, or with a confederate present who sat in the corner of the room repairing a piece of equipment without watching. As you can see in Figure 11.2 “Group Task Performance”, Markus found first that the difficult task was performed more slowly overall. But she also found an interaction effect, such that the participants performed the easy task faster but the more difficult task slower when a confederate was present in the room. Furthermore, it did not matter whether the other person was paying attention to their performance or

whether the other person just happened to be in the room working on another task—the *mere presence* of another person nearby influenced performance.

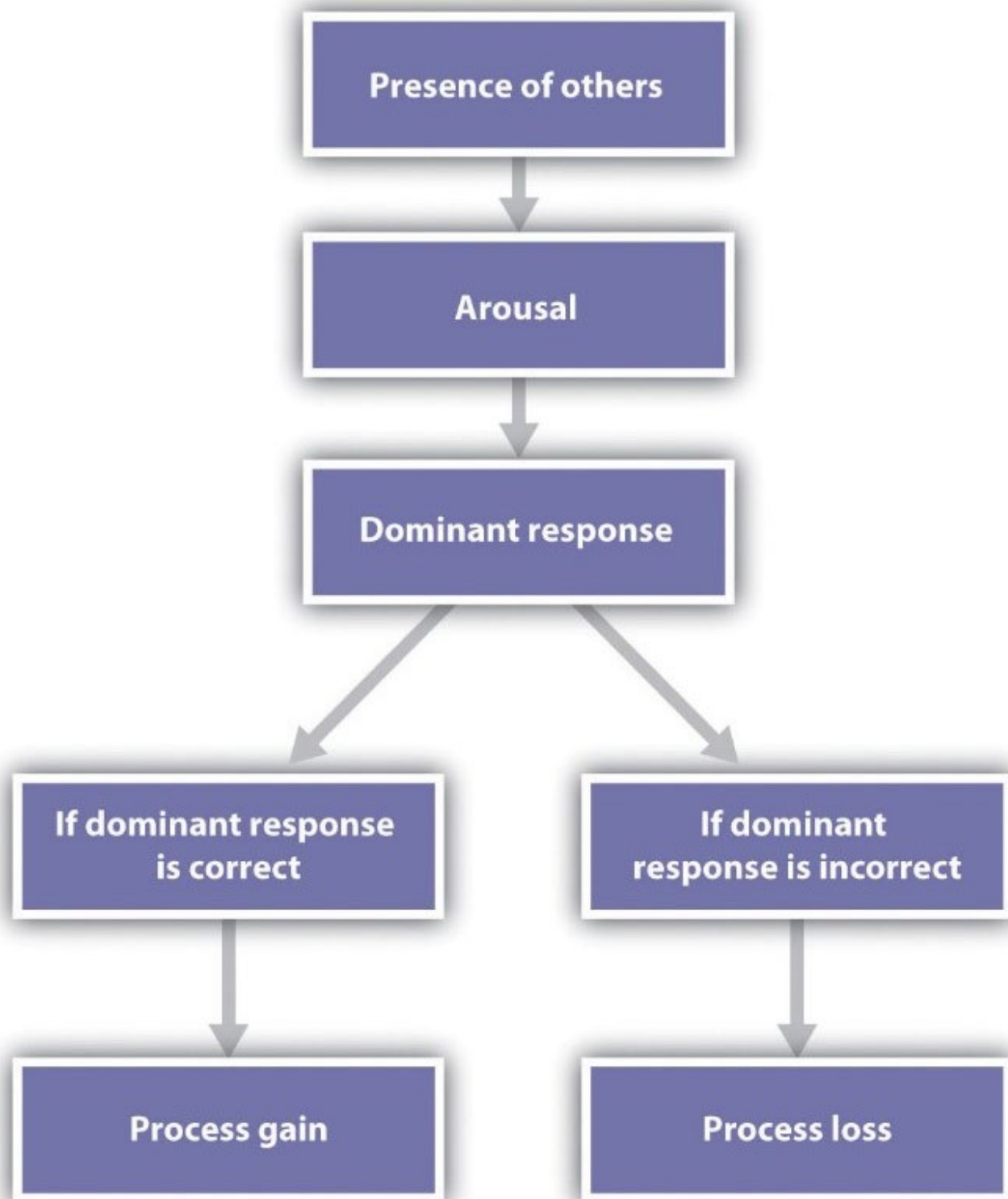
Figure 11.2 – Group Task Performance



In this experiment, participants were asked to perform a well-learned task (tying their shoes) and a poorly learned task (putting on a lab coat that tied in the back). There is both a main effect of task difficulty and a task-difficulty-by-performance-condition interaction. Data are from Markus (1978).

These results convincingly demonstrated that working around others could either help or hinder performance. But why would this be? One explanation of the influence of others on task performance was proposed by Robert Zajonc (1965). As shown in Figure 11.3 “Explaining [Social Facilitation](#) and [Social Inhibition](#)”, Zajonc made use of the affective component of arousal in his explanation. Zajonc argued that when we are with others, we experience more **arousal** than we do when we are alone, and that this arousal increases the likelihood that we will perform the [dominant response](#)—*the action that we are most likely to emit in any given situation*.

Figure 11.3 – Explaining Social Facilitation and Social Inhibition



According to the social facilitation model of Robert Zajonc (1965), the mere presence of others produces arousal, which increases the probability that the dominant response will occur. If the dominant response is correct, the task is performed better, whereas if the dominant response is incorrect, the task is performed more poorly.

The important aspect of Zajonc's theory was that the experience of arousal and

the resulting increase in the performance of the dominant response could be used to predict whether the presence of others would produce social facilitation or social inhibition. Zajonc argued that if the task to be performed was relatively easy, or if the individual had learned to perform the task very well (a task such as pedaling a bicycle or tying one's shoes), the dominant response was likely to be the correct response, and the increase in arousal caused by the presence of others would improve performance. On the other hand, if the task was difficult or not well learned (e.g., solving a complex problem, giving a speech in front of others, or tying a lab apron behind one's back), the dominant response was likely to be the incorrect one; and because the increase in arousal would increase the occurrence of the (incorrect) dominant response, performance would be hindered.

Zajonc's theory explained how the presence of others can increase or decrease performance, depending on the nature of the task, and a great deal of experimental research has now confirmed his predictions. In a [meta-analysis](#), Bond and Titus (1983) looked at the results of over 200 studies using over 20,000 research participants and found that the presence of others did significantly increase the rate of performance on **simple tasks** and decrease both the rate and the quality of performance on **complex tasks**.

One interesting aspect of Zajonc's theory is that because it only requires the concepts of arousal and dominant response to explain task performance, it predicts that the effects of others on performance will not necessarily be confined to humans. Zajonc reviewed evidence that dogs ran faster, chickens ate more feed, ants built bigger nests, and rats had more sex when other dogs, chickens, ants, and rats, respectively, were around (Zajonc, 1965). In fact, in one of the most unusual of all [social psychology](#) experiments, Zajonc, Heingartner, and Herman (1969) found that **cockroaches** ran faster on straight runways when other cockroaches were observing them (from behind a plastic window) but that they ran slower, in the presence of other roaches, on a maze that involved making a difficult turn, presumably because running straight was the dominant response, whereas turning was not.

Although the arousal model proposed by Zajonc is perhaps the most elegant, other explanations have also been proposed to account for social facilitation and social inhibition. One modification argues that we are particularly influenced by others when we perceive that the others are **evaluating us** or competing with us (Szymanski & Harkins, 1987). This is often called **evaluation apprehension**.

This makes sense because in these cases, another important motivator of human behavior—the desire to enhance the self—is involved in addition to arousal. In one study supporting this idea, Strube and his colleagues (Strube, Miles, & Finch, 1981) found that the presence of spectators increased the speed of joggers only when the spectators were facing the joggers and thus could see them and assess their performance.

The presence of others who expect us to do well and who are thus likely to be particularly **distraction** has been found to have important consequences in some real-world situations.

*When people do not work as hard in a group as they do when they are alone is known as **social loafing** (Karau & Williams, 1993).*

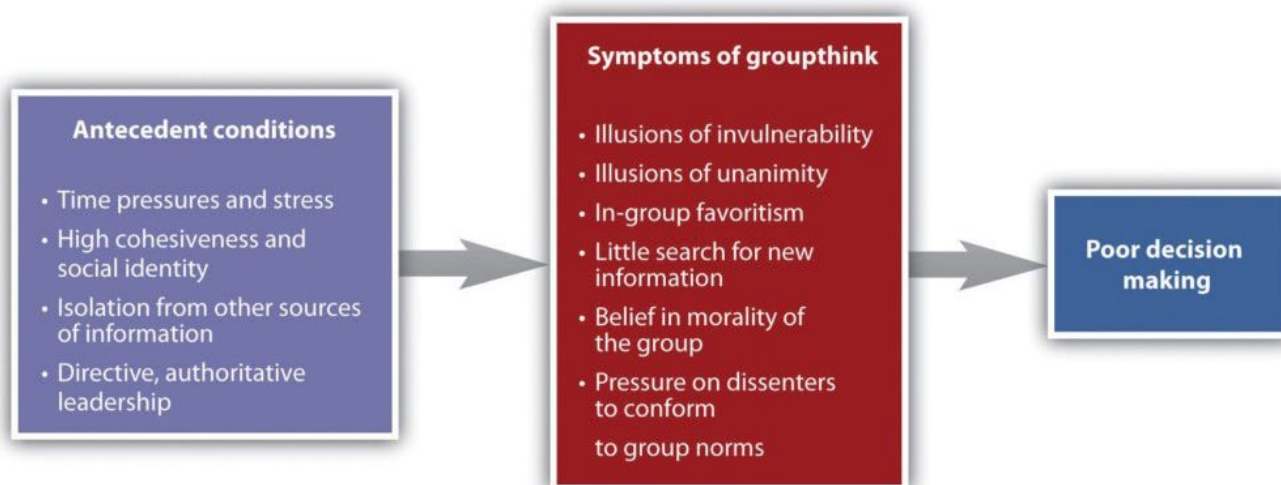
Losses Due to Group Conformity Pressures: Groupthink

Groups can make effective decisions only when they are able to make use of the advantages that come with group membership. These advantages include the ability to pool the information that is known to each of the members and to test out contradictory ideas through group discussion. Group decisions can be better than individual decisions only when the group members act carefully and rationally—considering all the evidence and coming to an unbiased, fair, and open decision. However, these conditions are not always met in real groups.

As we saw in the chapter opener, one example of a [group process](#) that can lead to very poor group decisions is [groupthink](#). *Groupthink occurs when a group*

that is made up of members who may actually be very competent and thus quite capable of making excellent decisions nevertheless ends up making a poor one as a result of a flawed group process and **strong conformity pressures** (Baron, 2005; Janis, 2007). Groupthink is more likely to occur in groups in which the members are feeling strong **social identity**—for instance, when there is a powerful and directive leader who creates a positive group feeling, and in times of stress and crisis when the group needs to rise to the occasion and make an important decision. The problem is that groups suffering from groupthink become unwilling to seek out or discuss discrepant or unsettling information about the topic at hand, and the group members do not express contradictory opinions. Because the group members are afraid to express ideas that contradict those of the leader or to bring in outsiders who have other information, the group is prevented from making a fully informed decision. Figure 11.6 “Antecedents and Outcomes of Groupthink” summarizes the basic causes and outcomes of groupthink.

Figure 11.6 – Antecedents and Outcomes of Groupthink



Although at least some scholars are skeptical of the importance of groupthink in real group decisions (Kramer, 1998), many others have suggested that groupthink was involved in a number of well-known and important, but very poor, decisions made by government and business groups. Decisions analyzed in terms of groupthink include the decision to invade Iraq made by President George W. Bush and his advisers; the decision of President John Kennedy and his advisers to commit U.S. forces to help with an invasion of Cuba, with the

goal of overthrowing Fidel Castro in 1962; and the lack of response to warnings on an attack on Pearl Harbor, Hawaii, in 1941.

Careful analyses of the decision-making process in these cases have documented the role of conformity pressures. In fact, the group process often seems to be arranged to maximize the amount of conformity rather than to foster free and open discussion. In the meetings of the Bay of Pigs advisory committee, for instance, President Kennedy sometimes demanded that the group members give a voice vote regarding their individual opinions before the group actually discussed the pros and cons of a new idea. The result of these conformity pressures is a general unwillingness to express ideas that do not match the group norm.

The pressures for conformity also lead to the situation in which only a few of the group members are actually involved in conversation, whereas the others do not express any opinions. Because little or no dissent is expressed in the group, the group members come to believe that they are in complete agreement. In some cases, the leader may even select individuals (known as mindguards) whose job it is to help quash dissent and to increase conformity to the leader's opinions.

An outcome of the high levels of conformity found in these groups is that the group begins to see itself as extremely valuable and important, highly capable of making high-quality decisions, and invulnerable. In short, the group members develop extremely high levels of conformity and social identity. Although this social identity may have some positive outcomes in terms of a commitment to work toward group goals (and it certainly makes the group members feel good about themselves), it also tends to result in illusions of invulnerability, leading the group members to feel that they are superior and that they do not need to seek outside information. Such a situation is conducive to terrible decision making and resulting fiascos.

Group Polarization

One common task of groups is to come to a consensus regarding a judgment or decision, such as where to hold a party, whether a defendant is innocent or guilty, or how much money a corporation should invest in a new product. Whenever a majority of members in the group favors a given opinion, even if that majority is very slim, the group is likely to end up **adopting** that **majority opinion**. Of course, such a result would be expected, since, as a result of conformity pressures, the group's final judgment should reflect the average of group members' initial opinions.

Although groups generally do show pressures toward conformity, the tendency to side with the majority after group discussion turns out to be even stronger than this. It is commonly found that groups make even more extreme decisions, in the direction of the existing norm, than we would predict they would, given the initial opinions of the group members. [Group polarization](#) is said to occur when, *after discussion, the attitudes held by the individual group members become more extreme than they were before the group began discussing the topic* (Brauer, Judd, & Gliner, 2006; Myers, 1982).

Because the group as a whole is taking responsibility for the decision, the individual may be willing to take a more extreme stand, since he or she can share the blame with other group members if the risky decision does not work out.

Group polarization does not occur in all groups and in all settings but tends to happen when two conditions are present: First, the group members must have an initial leaning toward a given opinion or decision. If the group members generally support liberal policies, their opinions are likely to become even more liberal after discussion. But if the group is made up of both liberals and conservatives, [group polarization](#) would not be expected. Second, group polarization is strengthened by discussion of the topic. For instance, in the research by Myers and Kaplan (1976) just reported, in some experimental conditions the group members expressed their opinions but did not discuss the issue, and these groups showed less polarization than groups that discussed the issue.

Group polarization has also been observed in important real-world contexts, including financial decision-making in group and corporate boardrooms (Cheng & Chiou, 2008; Zhu, 2010), and it may also occur in other situations. It has been argued that the recent polarization in political attitudes in the United States (the “blue” Democratic states versus the “red” Republican states) is occurring in large part because each group spends time communicating with other like-minded group members, leading to more extreme opinions on each side. And it has been argued that terrorist groups develop their extreme positions and engage in violent behaviors as a result of the group polarization that occurs in their everyday interactions (Drummond, 2002; McCauley, 1989). As the group members, all of whom initially have some radical beliefs, meet and discuss their concerns and desires, their opinions polarize, allowing them to become progressively more extreme. Because they are also away from any other influences that might moderate their opinions, they may eventually become mass killers.

Group polarization is the result of both cognitive and affective factors. The general idea of the *persuasive arguments approach* to explaining group polarization is cognitive in orientation. This approach assumes that there is a set of potential arguments that support any given opinion and another set of potential arguments that refute that opinion. Furthermore, an individual's current opinion about the topic is predicted to be based on the arguments that he or she is currently aware of. During group discussion, each member presents arguments supporting his or her individual opinions. And because the group members are initially leaning in one direction, it is expected that there will be many arguments generated that support the initial leaning of the group members. As a result, each member is exposed to new arguments supporting the initial leaning of the group, and this predominance of arguments leaning in one direction polarizes the opinions of the group members (Van Swol, 2009). Supporting the predictions of persuasive arguments theory, research has shown that the number of novel arguments mentioned in discussion is related to the amount of polarization (Vinokur & Burnstein, 1978) and that there is likely to be little group polarization without discussion (Clark, Crockett, & Archer, 1971).

But group polarization is in part based on the affective responses of the individuals—and particularly the social identity they receive from being good group members (Hogg, Turner, & Davidson, 1990; Mackie, 1986; Mackie & Cooper, 1984). The idea here is that group members, in their desire to create positive social identity, attempt to differentiate their group from other implied or actual groups by adopting extreme beliefs. Thus the amount of group polarization observed is expected to be determined not only by the norms of the ingroup but also by a movement away from the norms of other relevant outgroups. In short, this explanation says that groups that have well-defined (extreme) beliefs are better able to produce social identity for their members than are groups that have more moderate (and potentially less clear) beliefs.

Group polarization effects are stronger when the group members have high social identity (Abrams, Wetherell, Cochrane, & Hogg, 1990; Hogg, Turner, & Davidson, 1990; Mackie, 1986). Diane Mackie (1986) had participants listen to three people discussing a topic, supposedly so that they could become familiar with the issue themselves to help them make their own decisions. However, the individuals that they listened to were said to be members of a group that they would be joining during the upcoming experimental session, members of a group that they were not expecting to join, or some individuals who were not a group at all. Mackie found that the perceived norms of the (future) ingroup were seen as more extreme than those of the other group or the individuals, and that the participants were more likely to agree with the arguments of the ingroup. This finding supports the idea that group norms are perceived as more extreme for groups that people identify with (in this case, because they were expecting to join it in the future). And another experiment by Mackie (1986) also supported the social identity prediction that the existence of a rival outgroup increases polarization as the group members attempt to differentiate themselves from the other group by adopting more extreme positions.

Taken together then, the research reveals that another potential problem with group decision making is that it can be polarized. These changes toward more extreme positions have a variety of causes and occur more under some conditions than others, but they must be kept in mind whenever groups come

together to make important decisions.

Key Takeaways

- Although groups may sometimes perform better than individuals, this will occur only when the people in the group expend effort to meet the group goals and when the group is able to efficiently coordinate the efforts of the group members.
- Some group process losses are due to difficulties in coordination and motivation (**social loafing**).
- Some group process losses are the result of **groupthink**—when a group, as result of a flawed group process and strong conformity pressures, makes a poor judgment.
- Group decisions can also be influenced by **group polarization**—when the attitudes held by the individual group members become more extreme than they were before the group began discussing the topic.

Chapter Summary

Groups are also more effective when they develop appropriate [social norms](#)—for instance, norms about sharing information. Information is more likely to be shared when the group has plenty of time to make its decision. The group leader is extremely important in fostering norms of open discussion.

Perhaps the most straightforward approach to getting people to work harder in groups is to provide rewards for performance. This approach is frequently, but not always, successful. People also work harder in groups when they feel that they are contributing to the group and that their work is visible to and valued by the other group members.

One aspect of planning that has been found to be strongly related to positive group performance is the setting of goals that the group uses to guide its work.

Groups that set specific, difficult, and yet attainable goals perform better. In terms of group diversity, there are both pluses and minuses. Although diverse groups may have some advantages, the groups—and particularly the group leaders—must work to create a positive experience for the group members.

Your new knowledge about working groups can help you in your everyday life. When you find yourself in a working group, be sure to use this information to become a better group member and to make the groups you work in more productive.

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10.2 How the Social Situation Creates Conflict: The Role of Social Dilemmas

Learning Objectives

1. Explain the concepts of public goods and social dilemmas, and how these conflicts influence human interactions.
2. Describe the principles of the prisoner's dilemma game that make it an effective model for studying social dilemmas.
3. Review the different laboratory games that have been used to study social dilemmas.
4. Summarize the individual difference and cultural variables that relate to cooperation and competition.

If human beings are well-equipped to cooperate with each other, and if morality, social fairness, and other human features favor it, why are so many social relationships still competitive? If you guessed that the competition comes not so much from the people as it does from the nature of the [social situation](#), then you would be correct. In short, competition is often caused by the [social dilemma](#) itself—the dilemma creates patterns whereby even when we want to be good, the situation nevertheless rewards us for being selfish. Ross and Ward (1995) found that participants played a game more competitively when it was described as a “Wall Street Broker Game” than when the same game was called a “Community Game.” And other studies have found that subliminal [priming](#) of money or business materials (e.g., boardroom tables and business suits) increases competition (Kay, Wheeler, Bargh, & Ross, 2004; Vohs, Meed, &



Goode, 2006).

Social dilemmas occur when the members of a group, [culture](#), or society are in potential conflict over the creation and use of shared [public goods](#). [Public goods](#) are *benefits that are shared by a community at large and that everyone in the group has access to, regardless of whether or not they have personally contributed to the creation of the goods* (Abele, Stasser, & Chartier, 2010). In many cases, the public good involves the responsible use of a resource that if used wisely by the group as a whole will remain intact but if overused will be destroyed. Examples include the crabs in the Chesapeake Bay, water in local reservoirs, public beaches, and clean air. In other cases, the public good involves a service—such as public television or public radio—that is supported by the members of the community but that is used freely by everyone in the community.

Let's consider first *a case in which a social dilemma leads people to overuse an existing public good*—a type of social dilemma called a [harvesting dilemma](#). One example, called **the commons dilemma**, was proposed by Garrett Hardin (1968). Hardin noted that in many towns in Europe, there was at one time a centrally located pasture, known as the commons, which was shared by the inhabitants of the village to graze their livestock. But the commons was not always used wisely. The problem was that each individual who owned livestock wanted to be able to use the commons to graze his or her own animals. However, when each group member took advantage of the commons by grazing many animals, the commons became overgrazed, the pasture died, and the commons was destroyed.

Although Hardin focused on the particular example of the commons, he noted that the basic dilemma of individual needs and desires versus the benefit of the group as whole could also be found in many contemporary public goods issues, including the use of limited natural resources and public land. In large cities, most people may prefer the convenience of driving their own car to work each day rather than taking public transportation. Yet this behavior uses up public goods (roads that are not clogged with traffic, and air that is free of pollution).

People are lured into the dilemma by short-term self-interest, seemingly without considering the potential long-term costs of the behavior, such as air pollution and the necessity of building even more highways.

Social dilemmas such as the commons dilemma are arranged in a way that it is easy to be selfish because the personally beneficial choice (such as using water during a water shortage or driving to work alone in one's own car) produces benefits for the individual, no matter what others do. Furthermore, social dilemmas tend to work on a type of "time delay." Because the long-term negative outcome (the extinction of fish species or dramatic changes in the climate) is far away in the future, and yet the individual benefits are occurring right now, it is difficult to see how many costs there really are. The paradox, of course, is that if everyone takes the personally selfish choice in an attempt to maximize his or her own rewards, the long-term result is poorer outcomes for every individual in the group. Each individual prefers to make use of the public goods for himself or herself, whereas the best outcome for the group as a whole is to use the resources more slowly and wisely.

Another type of social dilemma—the [contributions dilemma](#)—occurs *when the short-term costs of a behavior lead individuals to avoid performing it, and this may prevent the long-term benefits that would have occurred if the behaviors had been performed*. An example of a contributions dilemma occurs when individuals have to determine whether or not to donate to the local public radio or television station. If most people do not contribute, the TV station may have lower quality programming, or even go off the air entirely, thus producing a negative outcome for the group as a whole. However, if enough people already contribute, then it is not in anyone's own best interest to do so, because the others will pay for the programming for them. Contributions dilemmas thus encourage people to free ride, relying on other group members to contribute for them.

The Prisoner's Dilemma

One method of understanding how individuals and groups behave in social

dilemmas is to create such situations in the laboratory and observe how people react to them. The best known of these laboratory simulations is called **the prisoner's dilemma game** (Poundstone, 1992). The [prisoner's dilemma game](#) is a *laboratory simulation that models a social dilemma in which the goals of the individual compete with the goals of another individual (or sometimes with a group of other individuals)*. Like all social dilemmas, the prisoner's dilemma makes use of the assumptions of social [learning](#) approaches to behavior that assume that individuals will try to maximize their own outcomes in their interactions with others.

In the prisoner's dilemma, the participants are shown a *payoff matrix* in which numbers are used to express the potential outcomes for the each of the players in the game, given the decisions made by each player. The payoffs are chosen beforehand by the experimenter to create a situation that models some real-world outcome. Furthermore, in the prisoner's dilemma, the payoffs are normally arranged as they would be in a typical social dilemma, such that each individual is better off acting in his or her immediate self-interest, and yet if all individuals act according to their self-interest, then everyone will be worse off.

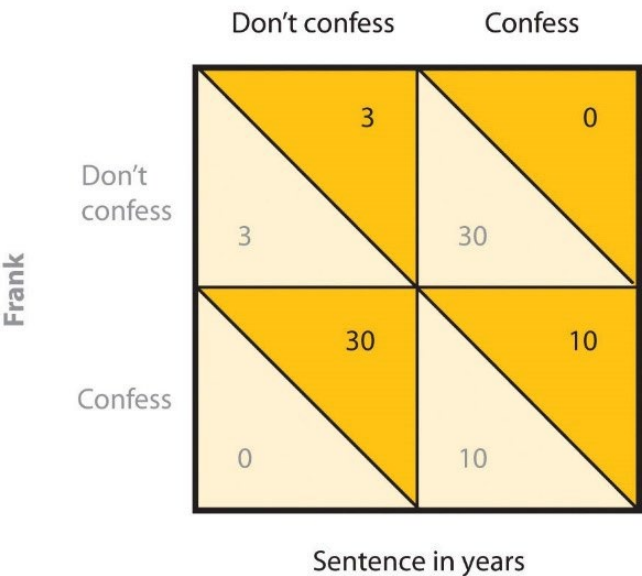
In its original form, the prisoner's dilemma involves a situation in which two prisoners (we'll call them Frank and Malik) have been accused of committing a crime. The police have determined that the two worked together on the crime, but they have only been able to gather enough evidence to convict each of them of a more minor offense. In an attempt to gain more evidence and thus to be able to convict the prisoners of the larger crime, each prisoner is interrogated individually, with the hope that he will confess to having been involved in the more major crime in return for a promise of a reduced sentence if he confesses first. Each prisoner can make either the cooperative choice (which is to not confess) or the competitive choice (which is to confess).

The incentives for either confessing or not confessing are expressed in a payoff matrix such as the one shown in Figure 10.2 "The Prisoner's Dilemma". The top of the matrix represents the two choices that Malik might make (either to confess that he did the crime or to not confess), and the side of the matrix

represents the two choices that Frank might make (also to either confess or not confess). The payoffs that each prisoner receives, given the choices of each of the two prisoners, are shown in each of the four squares.

If both prisoners take the cooperative choice by not confessing (the situation represented in the upper left square of the matrix), there will be a trial, the limited available information will be used to convict each prisoner, and each will be sentenced to a short prison term of 3 years. However, if either of the prisoners confesses, turning “state’s evidence” against the other prisoner, then there will be enough information to convict the other prisoner of the larger crime, and that prisoner will receive a sentence of 30 years, whereas the prisoner who confesses will get off free. These outcomes are represented in the lower left and upper right squares of the matrix. Finally, it is possible that both players confess at the same time. In this case, there is no need for a trial, and in return, the prosecutors offer a somewhat reduced sentence (of 10 years) to each of the prisoners.

Figure 10.2 – The Prisoner’s Dilemma
Malik



In the prisoner’s dilemma, two suspected criminals are interrogated separately. The payoff matrix indicates the outcomes for each prisoner, measured as the number of years each is sentenced to prison, as a result of each combination of cooperative (don’t confess) and competitive (confess) decisions. Outcomes for Malik are in the darker color, and outcomes for Frank are in lighter color.

Characteristics of the Prisoner’s Dilemma

The prisoner’s dilemma has two interesting characteristics that make it a useful model of a social dilemma. For one, the prisoner’s dilemma is arranged such that a positive outcome for one player does not necessarily mean a negative

outcome for the other player (i.e., the prisoner's dilemma is not a fixed-sum situation but an integrative one). If you consider again the matrix in Figure 10.2 "The Prisoner's Dilemma", you can see that if one player takes the cooperative choice (to not confess) and the other takes the competitive choice (to confess), then the prisoner who cooperates loses, whereas the other prisoner wins. However, if both prisoners make the cooperative choice, each remaining quiet, then neither gains more than the other, and both prisoners receive a relatively light sentence. In this sense, both players can win at the same time.

Second, the prisoner's dilemma matrix is arranged such that each individual player is motivated to take the competitive choice because this choice leads to a higher payoff regardless of what the other player does. Imagine for a moment that you are Malik, and you are trying to decide whether to cooperate (don't confess) or to compete (confess). And imagine that you are not really sure what Frank is going to do. Remember that the goal of the individual is to maximize rewards. The values in the matrix make it clear that if you think that Frank is going to confess, you should confess yourself (to get 10 rather than 30 years in prison). And it is also clear that if you think Frank is not going to confess, you should still confess (to get 0 rather than 3 years in prison). So the matrix is arranged such that the "best" alternative for each player, at least in the sense of pure self-interest, is to make the competitive choice, even though in the end both players would prefer the combination in which both players cooperate to the one in which they both compete.

Although initially specified in terms of the two prisoners, similar payoff matrices can be used to predict behavior in many different types of dilemmas involving two or more parties and including choices between helping and not helping, working and loafing, and paying and not paying debts (Weber & Messick, 2004). For instance, we can use the prisoner's dilemma to help us understand a contributions dilemma, such as why two roommates might not want to contribute to the housework. Each of them would be better off if they relied upon the other to clean the house. Yet if neither of them makes an effort to clean the house (the cooperative choice), the house becomes a mess and they will both be worse off.

Variations on the Prisoner's Dilemma

In many cases, the prisoner's dilemma game is played over a series of trials, in which players can modify their responses based on those given by their partners on previous trials. For example, the arms race between the Soviet Union and the United States during the Cold War can be seen as a social dilemma that occurs over time. Over a period of years, each country chooses whether to compete (by building nuclear weapons) or to cooperate (by not building nuclear weapons). And in each case, both countries feel that it is in their best interest to compete rather than cooperate.

The prisoner's dilemma can also be expanded to be played by more than two players. The behavior of individuals leaving a crowded parking lot, as an example, represents a type of prisoner's dilemma in which it is to each person's individual benefit to try to be the first to leave. However, if each person rushes to the exit without regard for others, a traffic jam is more likely to result, which slows down the process for everyone. If all individuals take the cooperative choice—waiting until their turn—everyone wins.

Resource Dilemma Games

In addition to the prisoner's dilemma, social dilemmas have been studied using games in which a group of individuals share a common pool of resources. In these *resource dilemma games*, the participants may extract or harvest resources from the pool, and it is to their individual advantage to do so. Furthermore, as the resources are used, the pool can replenish itself through a fixed schedule, which will allow the individuals to continue to harvest over long periods of time. Optimal use of the resource involves keeping the pool level up and harvesting only as much as will be replenished in the given time period. Overuse of the pool provides immediate gain for the individuals but has a long-term cost in the inability to make harvests at a later time.

In one version of a resource dilemma game (Edney, 1979), the participants sit

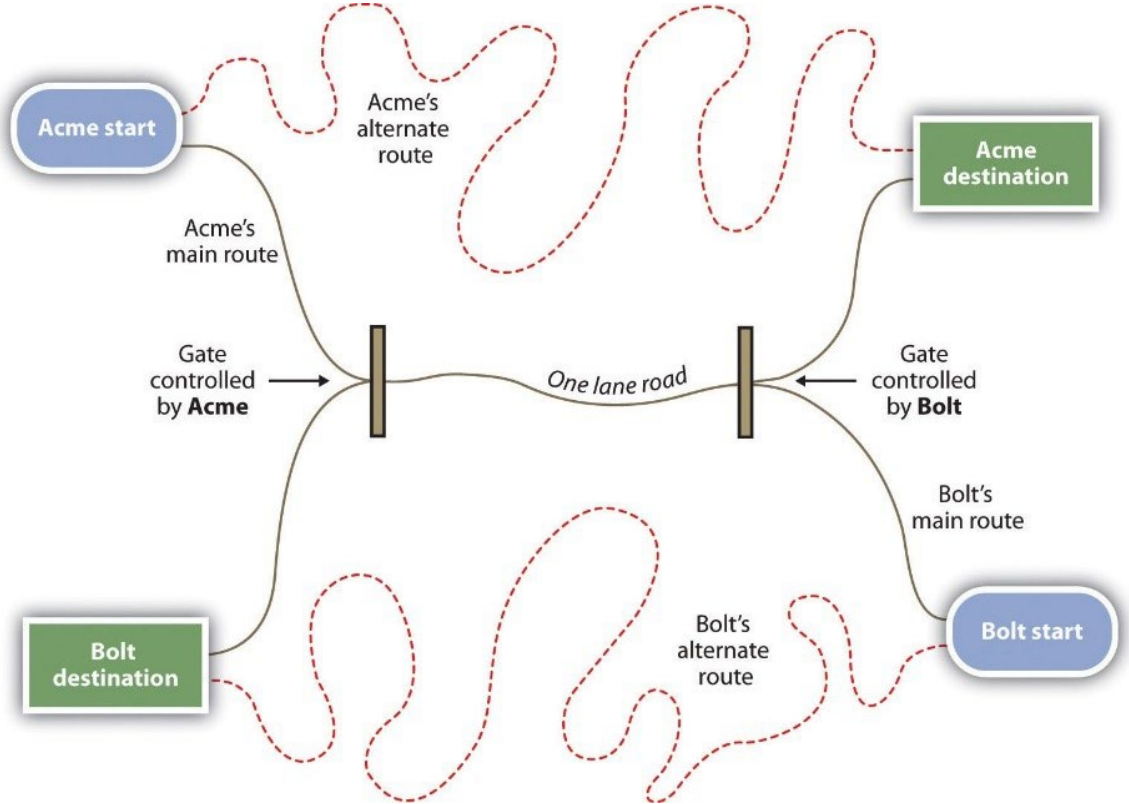
around a bowl of metal nuts, and the goal is to get as many nuts as one can. The experimenter adds nuts to the bowl such that the number of nuts in the bowl doubles every 10 seconds. However, the individual players are also motivated to harvest nuts for themselves and are allowed to take out as many nuts as they like at any time. In Edney's research, rather than cooperating and watching the pool grow, the participants almost immediately acted in their self-interest, grabbing the nuts from the bowl. In fact, Edney reported that 65% of the groups never got to the first 10-second replenishment!

Research Focus

The Trucking Game

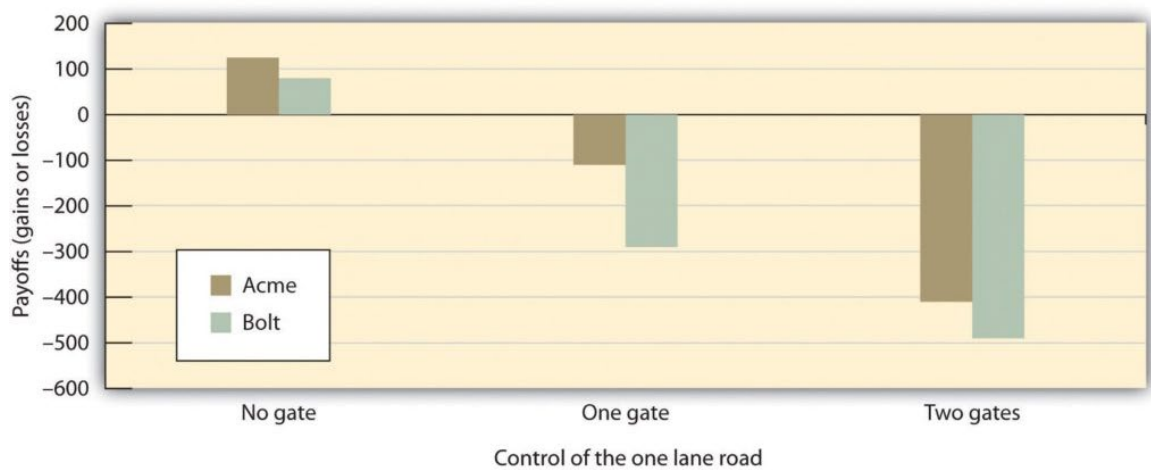
Another example of a laboratory simulation that has been used to study conflict is the trucking game. In the original research (Deutsch & Krauss, 1960), pairs of women played the trucking game. Each woman was given \$4 to begin with and was asked to imagine herself as the owner of one of two trucking companies (Acme or Bolt) that carried merchandise over the roads shown in the figure called "The Road Map From the Trucking Game". Each time either player's truck reached the destination on the opposite side of the board, she earned 60 cents, minus operating costs (1 cent for each second taken by the trip). However, the game was also arranged to create the potential for conflict. Each participant wanted to travel on the main road in order to get to the destination faster, but this road was arranged to be so narrow that only one truck could pass at a time. Whenever the two trucks met each other on this narrow road, one of them was eventually forced to back up. Thus there are two choices to getting to the destination. The players had to either take the long, winding roads, thus eliminating their profits (each player would lose 10 cents on each trip if they were forced to take the long road) or figure out a way to share the use of the one-lane road.

Figure 10.3 – The Road Map From the Trucking Game – From Deutsch (1973).



Deutsch and Krauss made the game even more interesting by creating experimental conditions in which either or both of the truck company owners had a gate that controlled access to the road. In the *unilateral-threat condition*, only Acme had a gate. Thus if Bolt attempted to use the main road, Acme could close the gate, forcing Bolt to back up and enabling Acme to reopen the gate and proceed quickly to the destination. In the *bilateral-threat condition*, both sides had gates, whereas in the *no-threat condition*, there were no gates.

Figure 10.4 – Outcomes of a Trucking Game Study. Data are from Deutsch and Krauss (1960).



As shown in the figure “Outcomes of a Trucking Game Study,” participants without gates soon learned to share the one-lane road, and, on average, each made a profit. However, threat in the form of a gate produced conflict and led to fewer profits, although in many cases the participants learned to deal with these problems over time and improved their payoffs as the game went on (Lawler, Ford, & Blegen, 1988; Shomer, Davis, & Kelley, 1966). Participants lost the most money in the bilateral-threat condition in which both sides were given gates that they could control. In this situation, conflict immediately developed, and there were standoffs on the middle road that wasted time and prevented either truck from moving.

Two results of this study are particularly surprising. First, in the unilateral threat condition, both players (including Acme, who had control of the gate) made less money than did those in the no-threat condition (although it is true that in this condition, Acme did lose less than Bolt). Thus being able to threaten the other was not successful for generating overall profits. Second, in the conditions in which both individuals had gates, both individuals actually did worse than they did when only one individual had a gate. Thus when an opponent is able to threaten you, it may be to your benefit to not return with a threat of your own—the ability to counteract the threats of your partner may not always help you but rather may produce even more conflict and losses for both parties.

Who Cooperates and Who Competes?

Although we have to this point focused on how situational variables, such as the nature of the payoffs in the matrix, increase the likelihood that we will compete rather than cooperate, not everyone is influenced the same way by the situation—the personality characteristics of the individuals also matter. In general, people who are more self-oriented are more likely to compete, whereas people who are more other-oriented are more likely to cooperate (Balliet, Parks, & Joireman, 2009; Sagiv, Sverdlik, & Schwarz, 2011). For instance, Campbell, Bush, Brunell, and Shelton (2005) found that students who were highly narcissistic (i.e., very highly self-focused) competed more in a resource dilemma and took more of the shared resource for themselves than did the other people playing the game.

Research Focus

Self and Other Orientations in Social Dilemmas

Paul Van Lange and his colleagues (Van Lange, 1999; Van Lange & Kuhlman, 1994) have focused on the person determinants of [cooperation](#) by characterizing individuals as one of two types—those who are “pro-social,” meaning that they are high on [other-concern](#) and value cooperation, and those who are “pro-self” and thus tend to behave in a manner that enhances their own outcomes by trying to gain advantage over others by making competitive choices.

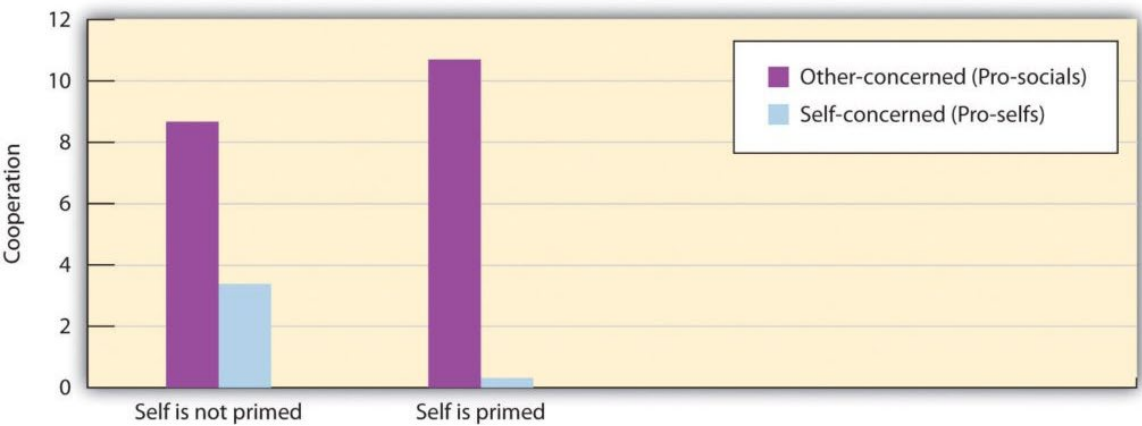
Sonja Utz (2004) tested how people who were primarily self-concerned would respond differently than those who were primarily other-concerned when the self-concept was activated. In her research, male and female college students first completed a measure designed to assess whether they were more pro-social or more pro-self in orientation. On this measure, the participants had to make

choices about whether to give points to themselves or to another person on a series of tasks. The students who tended to favor themselves were classified as pro-self, whereas those tended to favor others were classified as pro-social.

Then all the students read a story describing a trip to a nearby city. However, while reading the story, half of the students (the self-priming condition) were asked to circle all the pronouns occurring in the story. These pronouns were arranged to be self-relevant and thus to activate the self-concept—"I," "we," "my," and so forth. The students in the control condition, however, were instructed to circle the prepositions, which were not self-relevant (e.g., "of" and "after").

Finally, the students participated in a series of games in which they had to make a choice between two alternative distributions of points between themselves and another person. As you can see in the following figure, the self-manipulation influenced the pro-self students (who were primarily self-oriented already) in a way that they became even less cooperative and more self-serving. However, the students who were initially pro-social became even more cooperative when the self-concept was activated.

Figure 10.5

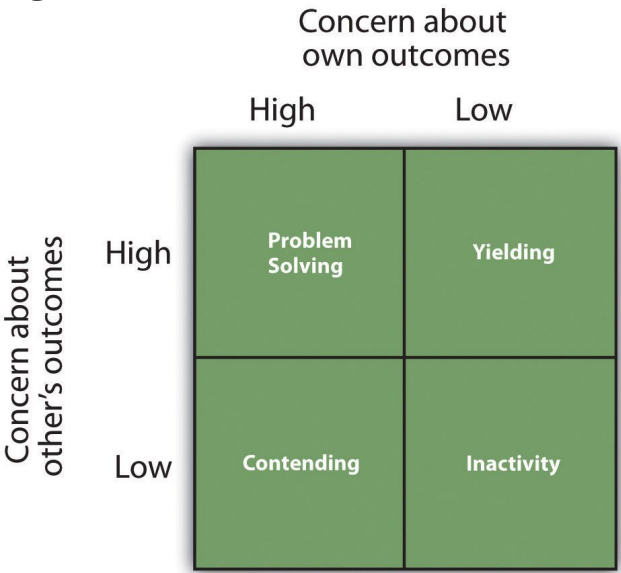


Priming the self-concept increased cooperation for those who were other-concerned but increased competition for those who were self-concerned. Data are from Utz (2004).

Although it is possible that people are either self-concerned or other-concerned, another possibility is that people vary on both of these dimensions simultaneously, such that some people may be high on both [self-concern](#) and other-concern. The dual-concern model of cooperation and competition (Pruitt & Rubin, 1986) is based on this approach, and the four resulting personality types are outlined in Figure 10.6 “The Dual-Concern Model”.

The dual-concern model suggests that individuals will relate to social dilemmas, or other forms of conflict, in different ways, depending on their underlying personal orientations or as influenced by the characteristics of the situation that orient them toward a given concern. Individuals who are focused primarily on their own outcomes but who do not care about the goals of others are considered to be *contending* in orientation. These individuals are expected to try to take advantage of the other party, for instance, by withholding their contributions in social dilemmas. Those who are focused primarily on the others’ outcomes, however, will be *yielding* and likely to make cooperative choices. Individuals who are not concerned about the interests of either the self or others are *inactive* and unlikely to care about the situation or to participate in solving it at all.

Figure 10.6 – The Dual-Concern Model



The interesting prediction of the dual-concern model is that being concerned with one’s own outcomes is not necessarily harmful to the possibility of cooperation. The individuals who are focused on maximizing their own outcomes *but who are also concerned with the needs of the others* (the *problem solvers*) are expected to be as likely to cooperate as are those who are yielding. In fact, the dual-concern model suggests that these individuals may be the best

negotiators of all because they are likely to go beyond the trap posed by the dilemma itself, searching for ways to produce new and creative solutions through creative thinking and compromise.

Gender and Cultural Differences in Cooperation and Competition

You might be wondering whether men or women are more cooperative. Because women are on average more concerned about maintaining positive relationships with others, whereas men are on average more self-concerned, it might be expected that women might be more likely to cooperate than men. And some research has supported this idea. For instance, in terms of whether or not people accepted an initial offer that was made to them or demanded more, Babcock, Gelfand, Small, and Stayn (2006) found that about half of the men they sampled negotiated a salary when they took their first job offer, whereas only about one eighth of the women reported doing so. Not surprisingly, women received substantially lower average annual starting salaries than did the men, a fact that is likely to contribute to the wage gap between men and women. And Small, Gelfand, Babcock, and Gettman (2007) found that, overall, women were less likely than men to try to bargain for personal gain in an experimental task. Small and colleagues concluded that women felt that asking for things for themselves was socially inappropriate, perhaps because they perceive that they have less [social power](#) than do men.

Although at least some studies have found that there are gender differences, an interactionist approach to the situation is even more informative. It turns out that women compete less than men in some situations, but they compete about much as men do in other situations. For example, Bowles, Babcock, and McGinn (2005) showed that the roles that are activated at the [negotiation](#) table (i.e., whether one is negotiating for oneself or on behalf of others) are important triggers for gender differences. Women negotiated as well as men when they were negotiating for others, but they negotiated less strongly than men did for themselves. And Kray, Galinsky, and Thompson (2002) showed that gender

differences in negotiation behavior are strongly affected by cognitive constructs that are accessible during negotiation. In general, gender differences in negotiation seem to occur in situations in which other-concern is highly accessible but are reduced or eliminated in situations in which other-concern is less accessible (Gelfand, Major, Raver, Nishii, & O'Brien, 2006). A recent [meta-analysis](#) of 272 research results (Baillet, Li, Macfarlan, & van Vugt, 2011) found that overall, men and women cooperated equally. But men cooperated more with other men than women cooperated with other women. In mixed-sex interactions, women were more cooperative than men.

And there are also cultural differences in cooperation, in a direction that would be expected. For instance, Gelfand et al. (2002) found that Japanese students—who are more [interdependent](#) and thus generally more other-concerned—were more likely to cooperate and achieved higher outcomes in a negotiation task than did students from the United States (who are more individualistic and self-oriented; Chen, Mannix, & Okumura, 2003).

Key Takeaways

- The behavior of individuals in conflict situations is frequently studied using laboratory games such as the **prisoner's dilemma**. Other types of laboratory games include resource dilemma games and the trucking game.
- Taken together, these games suggest that the most beneficial approach in social dilemmas is to maintain a balance between self-concern and other-concern.
- Individual differences in cooperation and competition, such as those proposed by the dual-concern model, show that individuals will relate to social dilemmas depending on their underlying personal orientations.
- Although women do compete less than men in some situations, they compete about as much as men do in other situations. There are cultural differences in cooperation.

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