



FIFTEENTH GLOBAL EDITION

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Social Psychology

Fifteenth Global Edition

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Dedication

To Phil Schlaman, my best friend and essential social support; You make it all worthwhile.

—Nyla R. Branscombe

To the people I care about most and who care most about me— Rebecca, Ted, Melissa, Samantha, Randy, Paul and Leah; And to the colleagues who helped make my life's journey such a happy one— Donn Byrne, Roger Black, Jim Naylor, John Capaldi, and Mike Morris

-Robert A. Baron

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Preface

Social Psychology in a Changing World

"One Child, one teacher, one pen and one book can change the world."

-Malala Yousafzai

"I believe innovation is the most powerful force for change in the world."

-Bill Gates

"Psychology cannot tell people how they ought to live their lives. It can, however, provide them with the means for effecting personal and social change."

-Albert Bandura

The aims identified in these quotations are truly impressive ones, and we most assuredly share their faith in the transformative power of education. We agree that equipping people with new ways of understanding themselves and interacting with the world has far-reaching consequences. And—more importantly—we believe that social psychology does provide powerful means of comprehending why people think, feel, and act as they do, and these ideas, in turn, illuminate how the social world shapes who we are and the processes by which we can achieve change, in ourselves and the social world. As you know, the goal of changing the world through technology, at least in terms of its implications for how we interact with other people and access our accumulated knowledge, has in fact been metto "google" something has become a verb in everyday language, and Facebook and other social media have changed much about how we interact with each other. Just try to imagine life without the many forms of social media we use practically every hour of every day. Probably you cannot because digital technology has become woven into the very fabric of our lives so that we take them for granted and use them as though they are extensions of ourselves. While the founders of Google and Facebook sought to change how people interact with the world, social psychologists seek to illuminate the many "hidden processes" that shape how people influence each other. By providing you with a comprehensive overview of social psychological theory and

research, we believe the information in this book offers you a valuable means of learning about yourself and the social world in which we live.

The social world, which is the primary focus of this book, has changed tremendously in recent years, perhaps more quickly and dramatically than at any time in the past. That includes how we interact with each other, and a key point we will emphasize throughout the book is this: These changes have important implications for how we think about ourselves and other people. *Social psychology* is the branch of psychology that studies all aspects of our behavior with and toward others, our feelings and thoughts about them, and the relationships we develop with them. The central message for social psychology as a field, and for any book that seeks to represent it, is simple: Keep up with these technological changes in terms of their implications for social life, and this is precisely what we do with this 15th Global Edition.

We are happy to report that social psychology provides many important insights crucial to understanding the social changes we have described thus far and can provide you with the means of understanding how to create further—and beneficial—social change. The field continues to be the vibrant and adaptable one it has always been and, we predict, always will be. The scope of social psychological research (and knowledge acquired) has expanded rapidly in the past few years—in fact, much has been learned since the publication of the previous edition of this book—and this new edition fully reflects the many changes now occurring all over the world.

Our central goal for this new edition was to illustrate just how well our field has—and does—adjust to and reflect the changing social world. Technology is not simply changing the way we carry out certain tasks: It is also changing the way we live and—most important—how we interact with each other. Although many basic principles of social life remain, in essence, unchanged—for instance, the nature of love, hate, and emotions in-between—the ways in which these principles are *expressed* and *experienced* have changed drastically.

So, how, precisely, did we set out to reflect these major trends while fully and accurately describing the core of our field—the knowledge and insights that social psychologists have gathered through decades of systematic research? As the 2015 White House Social and Behavioral Sciences Team Report indicates, social psychological research consists of an impressive body of knowledge about how people

actually think, feel, and behave toward other people, and the accumulated knowledge identifies how changing social conditions can influence those responses, often with an eye to improving life for us all. Indeed, social psychological research has taught us much about the "human animal" that can and is being fruitfully applied in numerous domains. That is precisely what we aimed to do with this edition—illustrate how understanding social psychological processes can help to improve many aspects of life. The following is a summary of the major steps we took to accomplish these important goals.

Changes in Content

Changes in Content Within Each of the Chapters

Continuing a long tradition in which each edition of this textbook has included literally dozens of new topics, this 15th Global Edition is indeed "new." Across chapters, we present new lines of research, new findings, new theoretical perspectives, and effects of Covid. Here is a partial list of the topics included:

Chapter 1

- Emphasis on the importance of social relationships for psychological well-being.
- A section on the importance of meta-analysis in assessing an existing body of knowledge on a topic.
- Emphasis on how cultural factors shape our conceptions of the self and how that in turn affects individuals' comfort and ability to navigate different social settings.

Chapter 2

- A section on heuristic use under conditions of economic threat.
- A section on the "portion size effect" and how eating can reflect inadequate adjustment from a high anchor.
- Research on belief in free will and its implications for counterfactual thinking.

Chapter 3

- A new section called Dark Personality and Person Perception has been added.
- A discussion of attributions and terrorism—how perpetrators explain their actions.
- Research on how first impressions are revised over time.

Chapter 4

- A section that addresses how trying to conceal our identity can inhibit social interaction and harm wellbeing.
- Research addresses why introspection fails, and particularly why people apparently don't know that spending their money on others can make them happier than spending it on themselves.
- A section on how migration affects self-esteem—both international and domestic moves by students.

Chapter 5

- Research concerning the role of reactance in students' responses to instructor behaviors in the classroom.
- Research addressing how attitudes can be conditioned nonconsciously.
- Research examining when people's behavior reflects their abstract values and when it is based on their economic self-interests.

Chapter 6

- Coverage of how racial group membership affects responses to issues concerning police treatment of citizens.
- Research concerning how groups maintain a favorable view of themselves, despite treating other groups in a prejudicial fashion.
- Research illustrating how stereotypes create genderbased disparities in the workplace.

Chapter 7

- A section on social skills—our ability to get along with others—and their importance in many aspects of social life
- A discussion of how even trivial similarities to others (e.g., sharing the same first names) can increase liking for them.
- Information concerning the attributes that we look for in romantic partners change over the course of our relationships with them.

Chapter 8

- A discussion of the potential benefits of refusing to "go along," or not yielding to social pressure.
- Discussion of the effectiveness of various techniques (including several new ones) for gaining compliance from others—for getting other people to say "yes" to our requests.
- An entire section focused on unintentional social influence: How others influence us even when they are not trying to do so.

Chapter 9

- A discussion of "crowd-funding"—a form of online helping in which individuals donate money to entrepreneurs without ever meeting them and without expecting anything in return.
- A discussion of the role of social class in pro-social behavior.
- Findings concerning how feelings of anonymity (produced by darkness) can reduce willingness to help others.

Chapter 10

- Research concerning the role of genes in combination with exposure to stress affects aggression in children.
- A section on the effects of narcissism on aggression has been included.
- A section on situational factors that encourage aggressive behavior including gun availability.

Chapter 11

- Research concerning how groups create greater cohesion among their members when their distinctiveness is threatened.
- Research on how being part of a group helps people achieve a greater sense of control in their lives has been added.
- Research on distributive justice rules and how they vary across cultures was added.

Chapter 12

- This chapter offers a "social cure" perspective for managing the stresses in our lives and illustrates the critical role of social relationships for health, well-being, and achieving a meaningful life in a changing world.
- New discussion on biases in police arrests and decision-making has been added.
- Why practicing self-forgiveness following mistakes can help people change.

Special Features with Research Insights on Cutting-Edge Topics

To fully reflect current trends in social psychological research and the field's responsiveness to social change, we now include two special sections in each chapter. These sections, which are labeled "What Research Tells Us About...," integrate important new research that will

capture students' attention and excite their interest in new emerging topics in social psychology. Some examples are:

- A new research insights section on "People's Preference for the Status Quo."
- A new research insights section on "How Today's Decisions Are Shaped by Regret for Tomorrow's Outcomes."
- A new research insights section on "The Role of Nonverbal Cues in Job Interviews."
- A new research insights section on "Why Some People Conclude They Are Superior to Others."
- A new research insights section on "Prosocial Spending and Individual Happiness."
- A new research insights section on "The Importance of Belonging and Group Ties."
- A new research insights section on "Perceived Discrimination and Self-Esteem."
- A new research insights section on "Social Modeling and Fashion-related Attitude."
- A new research insights section on "Culture and Attitude Processes."
- A new research insights section on "Biases in Our Beliefs About Inequality."
- A new research insights section on "The Role of Existential Threat in Prejudice."
- A new research insights section on "Dramatic Differences in Appearance Between Partners: Is Love Really Blind?"
- A new research insights section on "Two Factors That Can Destroy Love: Jealousy and Infidelity."
- A new research insights section on "How Much We Really Conform."
- A new research insights section on "Leadership and Follower Compliance."
- A new research insights section on "Paying it Forward: Helping Others Because We Have Been Helped."
- A new research insights section on "How People React to Being Helped."
- A new research insights section on "The Role of Emotions in Aggression."
- A new research insights section on "Workplace Aggression."
- A new research insights section on "Dissent and Criticism of Our Groups—"Because We Care."
- A new research insights section on "The Importance of Being Treated With Respect."
- A new research insights section on "Reducing Posttraumatic Stress Among Veterans."
- A new research insights section on "The Relationship Between Emotions and Life Satisfaction Within Different Cultures."

Any textbook is valuable only to the extent that it is both useful and interesting to the students using it. To make this edition even better for students, we have included several student aids—features designed to enhance the book's appeal and usefulness. Included among these features are the following:

Learning Objectives: The aims of each major chapter section are presented at the beginning of each chapter. With these, students should know what they will learn before they begin each chapter.

Chapter Openings Linked to Important Trends and Events in Society: All chapters begin with examples reflecting current trends in society or real-life events that illustrate important principles of social life. Here are some examples:

- 1. How people must make judgments—from what college to attend to what health insurance option to select—with incomplete information (Chapter 2)
- 2. How many famous people have deceived the public and why their deception was so difficult to detect (Chapter 3)
- 3. Social media as a medium for presenting ourselves to others (Chapter 4)
- 4. How our beliefs about climate change are formed (Chapter 5)
- 5. How protest movements such as "Black Lives Matter" emerge and why there is a racial divide concerning police treatment of citizens (Chapter 6)
- 6. The powerful, practical advantages of being highly likable (Chapter 7)
- 7. How swindlers who cheated investors out of billions use social influence for selfish purposes (Chapter 8)
- 8. How more than 1.5 billion people have been helped to lead better lives by being provided with more efficient—and safer—cooking stoves (Chapter 9)
- 9. The goals of mass shooting perpetrators are compared with those committing aggression as part of a group to achieve political ends (Chapter 10)

- 10. The critical role of sharing an identity with an audience for effective communication in groups (Chapter 11)
- 11. How Ellen Johnson Sirleaf, President of Liberia from 2006 to 2018, the first elected female head of state in Africa, and 2011 Nobel Peace Prize winner, overcame adversity to achieve a happy life (Chapter 12)

End-of-Chapter Rapid Review: Each chapter ends with a Rapid Review section that recaps the key points covered under each learning objective.

Critical Thinking Questions: Each chapter includes Critical Thinking Questions at the end of the chapter that allow students to analyze, evaluate, and explain concepts they have learned.

Self-Test: Each chapter ends with Self-Test questions, which are multiple-choice questions, that provide students an opportunity to check their understanding of concepts learned.

Special Labels on All Graphs and Charts: To make these easy to understand, we continue to use the "special labels" that are a unique feature of this book.

Supplementary Materials

All excellent texts are supported by a complete package of supplementary material, for both the students and the instructor. This text offers a full array of such aids including:

- **Instructor Manual:** includes chapter outlines, lecture launchers, key terms, in-class, out-of-class activities, and answers to critical thinking questions.
- PowerPoint Presentation: provides a core template of the content covered throughout the text. Can easily be expanded for customization with your course.
- **Test Bank:** includes questions in multiple-choice and fill-in-the blanks formats.

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Nyla R. Branscombe & Robert A. Baron

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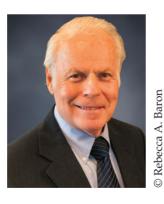


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Chapter 1

Social Psychology

The Science of the Social Side of Life



Learning Objectives

- **1.1** Evaluate the diverse topics that social psychology seeks to understand
- **1.2** Examine the major avenues that social psychology is currently exploring
- 1.3 Understand the methods social psychologists use to gain insight into the questions posed
- **1.4** Explain how theories play a key role in social psychological research
- **1.5** Identify how the dilemma of deception is addressed in social psychology

Protesting against climate change; following public health rules to reduce the spread of COVID-19; providing help to refugees who left their countries because of war, oppression, and human rights violations; and refraining from texting while driving—all these seem rather disconnected or irrelevant to one another, but there is a common thread running through them and that thread is they are all social behaviors expressed in different forms. Deciding to conserve energy or recycle your plastic waste, thinking about providing food and shelter to refugees from warzones, conforming to public health regulations to curb the spread of the coronavirus, and deciding not to use

your mobile phone while driving are not decisions that are made in a social vacuum. Whether other people (e.g., significant others, friends, mere acquaintances, and even counter-prototypes) are physically present or not, they can exert an influence on the decisions we make every day, from trivial things to major life decisions. This is because human beings are a social species. Each of us is connected to and influenced by other people, even if we're not always consciously aware of all the ways we are affected by them. Indeed, a fundamental message of social psychology is that both the good and the bad in our lives involve other people. As evidenced in the following quotations, people from all cultures and walks of life agree that our connections to others bring happiness and meaning to our lives. At the same time, we also know that other people—when they disagree with us, exclude us, or harm us—can be the source of our worst pain.

- The Dalai Lama: "Our prime purpose in this life is to help others."
- John Lennon, former musician with the Beatles: "Count your age by friends, not years."
- · Martin Luther King, Jr.: "Life's most persistent and urgent question is: What are you doing for others?"
- Bob Marley, famous reggae musician: "Truth is, everybody is going to hurt you: You just gotta find the ones worth suffering for."
- David Byrne, musician formerly of the Talking Heads: "Sometimes it's a form of love just to talk to somebody that you have nothing in common with and still be fascinated by their presence."
- Robert Alan Silverstein, author and social change activist: "In our hectic, fastpaced, consumer-driven society, it's common to feel overwhelmed, isolated and alone. . . . The sense of belonging we feel when we make the time to take an active role in our communities can give us a deeper sense of meaning and purpose."

Connecting with others—both as individuals and as part of social groups—is a major predictor not only of happiness and well-being but also of physical health. The Harvard Study of Adult Development, one of the world's longest adult life studies, has been tracking the physical and mental health of 268 Harvard students and their offspring since 1938. One of the key findings of the study is that happy and meaningful social relationships had a powerful effect on health outcomes, more than money, fame, and other individual achievements. If you had any lingering doubts about the importance of the social side of life, perhaps you don't anymore!

We also know that solitary confinement and social isolation are so bad for mental health that it is often considered "cruel and unusual punishment." This is why the COVID-19 pandemic has had such a wide impact on public health in 2020, by imposing social isolation and restriction of social contacts on billions of people around the world. A rapid review of recent research shows that children and adolescents experienced high rates of anxiety and depression during the COVID-19-induced social isolation. The disruptive effect of the COVID-19 pandemic has led global organizations, such as the Organization for Economic Co-operation and Development (OECD), to undertake initiatives to tackle loneliness and social isolation among the social groups mostly affected.

While we know that many people find the thought of a physically isolated existence to be disturbing, let's consider "disconnection from others" on a smaller, digital scale. Try to remember the last time you forgot your cell phone or lost access to Facebook, Twitter, or other social media outlets. How did it feel to be out of contact? Did it freak you out? Perhaps that's why it won't be surprising to learn that even these digital forms of connection to others help to satisfy our emotional needs. For example, research shows that among college students the number of Facebook friends predicts

Figure 1.1 Would Life in Isolation Be Worth Living?

Can you imagine what it would be like to live entirely alone, having no contact with other people? The COVID-19 pandemic has had a wide impact on public health in 2020 by imposing social isolation and restriction of social contacts on billions of people around the world. A rapid review of recent research shows that children and adolescents experienced high rates of anxiety and depression during the COVID-19-induced social isolation.



life satisfaction (Manago, Taylor, & Greenfield, 2012). It's safe to say, then, that social contact is a central aspect of our lives. In a very basic sense, it helps define who we are and the quality of our existence.

So, get ready for a fascinating journey, because the social side of life is the focus of this entire book. Social psychology is the branch of psychology that studies all aspects of our social existence—everything from love and helping people on the one hand, to prejudice, exclusion, and violence on the other. Social psychologists also investigate how groups influence us, how the social context we find ourselves in affects the way we make decisions, and how we explain ourselves and the actions of other people. As you will see, how we think about ourselves at any given point in time—our identity—is shaped by our relationships with other people, which in turn guides our social behavior. We will be addressing some questions you've probably thought about already. After all, the nature of the social world is of interest to all of us. But we believe that some of the answers concerning human social behavior that has emerged from social psychological research will nevertheless surprise and intrigue you.

Social psychology covers a lot of territory—much of what's central to human experience. What differentiates social psychology from other social sciences is its focus on explaining influences on the individual's thought and behavior. What differentiates social psychology from the informal observations of people that we all make is its scientific nature. What we mean by the science of social psychology is so crucial that we will explain it in this chapter, in terms of the different techniques that are used by social psychologists to go about answering fascinating questions about the social side of life.

We begin with a formal definition of social psychology: what it is and what it seeks to accomplish. Next, we'll describe several current trends in social psychology. These will be reflected throughout this book, so knowing about them at the start will help you understand why they are important. We'll also examine the pros and cons of

different methods used by social psychologists to answer questions about the social side of life. A working knowledge of these basic methods will help you understand how social psychologists add to our understanding of social thoughts and behavior, and will also be useful to you outside the context of this course to evaluate research findings you read about in major media outlets.

The importance of behavioral sciences—and of social psychological research in particular—has informed public and social policies in different domains, from tax evasion and financial fraud to climate change. It is no surprise that the British government and other governments and organizations across the globe consult Behavioral Insights teams (or Nudge Units) to better understand how to form, implement, and evaluate the outcomes of their policies (Oullier, 2013). As you will see, social psychologists have accumulated an impressive body of knowledge about how people think, feel, and behave, along with the circumstances that influence those responses. Indeed, social psychological research has taught us much about the "human animal" that is being fruitfully applied in numerous domains. These include understanding how people make use of digital technology and social media and how people can best cope with adversity, to making it easier for low-income teens to attend college and adults to participate in retirement savings plans. We believe that social psychological research informs us about how reforms can be made with the aim of improving people's lives. Given the empirical and scientific approach used by social psychologists to uncover "what works and what doesn't work," we think you will see why this branch of psychology is well-placed to provide answers to many questions.

Social Psychology

The study of how an individual's thoughts, emotions, and actions can be shaped by the real or imagined presence of other people or the social context we live in

Figure 1.2 What Is Science?

Many people believe that only fields that use equipment like that shown here to study the physical world can be viewed as scientific. Others think that "people watching" is a form of science. However, the term science actually refers to adherence to a set of basic values (e.g., accuracy, objectivity) and use of a set of methods to systematically examine almost any aspect of the world around us—including the social side of life. In contrast, other approaches that are not scientific in nature do not accept these values or use these methods.



1.1: Social Psychology: What It Is and Is Not

Objective Evaluate the diverse topics that social psychology seeks to understand

Providing a definition of almost any field is a complex task. In the case of social psychology, this difficulty is increased by the field's broad scope. As you will see in

every chapter of this book, social psychologists truly have a wide range of interests. Yet, despite this variation, most focus mainly on the following task: understanding how and why individuals behave, think, and feel as they do in social situations—ones involving the actual or symbolic presence of other people. How people define themselves and others in a given situation can alter how we behave. Accordingly, we define social psychology as the scientific field that seeks to understand the nature and causes of individual behavior, feelings, and thoughts in social situations. Another way to put this is to say that social psychology investigates the ways in which our thoughts, feelings, and actions are *influenced by* the social environments in which we find ourselves—by other people or our thoughts about them. We'll now clarify this definition by taking a closer look at several of its key aspects.

1.1.1: Social Psychology Is Scientific in Nature

Many people seem to believe that this term *science* applies only to fields such as chemistry, physics, and biology—ones that use the kind of equipment shown in Figure 1.2 to investigate some aspect of the physical world. If you share that view, you may find our suggestion that social psychology is a scientific discipline perplexing. How can a field that seeks to study the nature of love, the causes of aggression, the influence of groups on conceptions of ourselves, and many other topics be scientific in the same sense as physics or chemistry? The answer is surprisingly simple.

The term *science* does not refer to a special group of highly advanced fields. Rather, it refers to two things: (1) a set of values and (2) methods that can be used to study a wide range of topics. In deciding whether a given field is or is not scientific, therefore, the critical question is: *Does it adopt these values and methods*? To the extent the field does, it is scientific in nature. To the extent it does not, it falls outside the realm of science. We'll examine the procedures used by social psychologists in their research in detail in a later section, so here we will focus on the core values that all fields must adopt to be considered scientific in nature. Four of these are most important:

Accuracy: A commitment to gathering and evaluating information about the world (including social behavior) in as careful, precise, and error-free a manner as possible. This means that casual "people watching" that each of us might do at a crowded event will not meet this definition. Each of us may focus on different things so there is little precision, and the observations will lack *replicability*—the same "findings" when performed by someone else may not be obtained.

Objectivity: A commitment to obtaining and evaluating such information in a manner that is as free from bias as possible. This means that with casual "people watching" we may evaluate what we see differently than others would, so our observations lack objectivity.

Skepticism: A commitment to accepting findings as accurate only to the extent they have been verified over and over again. Here again you should notice the importance of *replication*—where different investigators can re-produce the procedure used by others and arrive at the same conceptual conclusions.

Open-Mindedness: A commitment to changing one's views—even those that are strongly held—if existing evidence suggests that these views are inaccurate. Social psychologists have produced plenty of surprises by conducting research, which has required us to reconsider the role of groups for our well-being, how many processes operate non-consciously, how the framing of issues can affect our attitudes and preferences, and why what actually makes people happy is often different than our expectations of what will do so. All of these have suggested revisions in assumptions about human nature.

Social psychology, as a field, is committed to these values and applies them in its efforts to understand the nature of social behavior. In contrast, fields that are *not* scientific make assertions about the world, and about people, that are not put to the careful test and analysis required by the values that guide social psychology. In such fields—ones like astrology and aromatherapy—intuition, faith, and unobservable forces are considered to be sufficient for reaching conclusions—the opposite of what is true in social psychology.

"But why adopt the scientific approach? Isn't social psychology just common sense?" Having taught for many years, we can almost hear you asking this question. After all, we all spend much of our lives interacting with other people and thinking about them, so in a sense, we are all amateur social psychologists. So, why don't we each just rely on our own experience and intuition as a basis for drawing conclusions about the social side of life?

Our answer is straightforward: because such sources provide an inconsistent and unreliable guide to understanding social behavior. This is so because our own experiences are unique and may not provide a solid foundation for answering general questions such as: "Why do people sometimes 'go along with the group' even when they

might disagree with what it is doing?" and "How can we know what other people are thinking or feeling at any given time?" In addition, as we have learned from social psychological research, people are often unaware of what influences them. Individuals may be able to generate "theories" about how they are or are not influenced by other people, but such common sense beliefs are often biased by wishful thinking. For example, as suggested by Figure 1.3, we might want to view ourselves as "independent" and fail to see how we are actually influenced by other people, or alternatively we might want to believe a certain kind of change is possible so we claim to have been influenced by others who share our views, perhaps more than we actually are.

It is also the case that there are widely endorsed ideas about various aspects of social life that are inconsistent with each other. Only objective research evidence can provide clear answers about which of such contradictory ideas are true. For instance, consider the following statement: "Absence makes the heart grow fonder." When people are separated from those they love, they miss them and may experience increased longing for them. Many people would agree with this idea, in part because they can retrieve an instance like that from their own memory. But now consider the following statement: "Out of sight, out of mind." Is this idea true? Did you, after leaving your high school sweetheart and swearing undying love, find a new romantic interest fairly quickly upon arriving at college? Many popular songs advocate just that—for instance, Crosby, Stills, Nash, and Young's song: "If you can't be with the one you love, love the one you're with." As you can see, these two views—both suggested by common sense and popular culture—are contradictory. The same is true for many other informal observations about human behavior—they each seem plausible, but often imply opposite conclusions. How about these: "Two heads are better than one," or the Chinese proverb "three monks have no water to drink." One suggests that when people work together, they perform better (e.g., make better decisions). The latter suggests that when people work together, they may act in ways that actually harm the product (e.g., that they make worse decisions). Much careful systematic research has revealed that whether groups show better or worse performance than individuals depends on a variety of factors: the nature of the task, whether the work can be effectively divided up, the expertise of the group members, and how well information is shared among them (Minson & Mueller, 2012; Stasser, Stewart, & Wittenbaum, 1995; van Ginkel & van Knippenberg, 2009).

Figure 1.3 Being Influenced by the Actions of Other People

We can be influenced by the behavior of other people - either by seeing and being with them via social media or by physically being immersed ourselves in such events. Such exposure to others, especially when we identify with them, often exerts powerful effects on our own behavior and thought.





By now, our main point should be clear: Common sense often suggests a confusing and inconsistent picture of human behavior. Yet, it can offer intriguing hypotheses that can be tested in controlled research. What it doesn't tell us is *when* various principles or generalizations hold—for instance, does "absence makes the heart grow fonder," primarily among relationships that have already attained a certain level of commitment? Likewise, it doesn't tell us for *whom*, or the sort of relationships, "out of sight, out of mind" is most likely to occur. Only a scientific approach that examines social thought and behavior in different contexts and populations (such as young versus older people) can provide that kind of information, and this is one basic reason that social psychologists put their faith in the scientific method: It yields more conclusive evidence. In fact, as you'll soon see, it is designed to help us determine not just *which* of the opposite sets of predictions mentioned earlier is correct, but also *when*, for *whom*, and *why* one or the other might apply.

But this is not the only reason for not relying on common sense. As we'll note over and over again (e.g., Chapters 2, 3, 4, 6, and 8), our thinking is subject to several types of biases that can lead us badly astray. Here's one example: Think back over major projects on which you have worked in the past (writing term papers, cooking a complicated dish, painting your room). Now, try to remember two things: (1) your initial estimates about how long it would take you to complete these jobs and (2) how long it actually took. Is there a gap between these two numbers? In all likelihood because most of us fall victim to the *planning fallacy*, there is a strong tendency to believe that projects will take less time than they actually do or, alternatively, that we can accomplish more in a given period of time than is really true (Halkjelsvik & Jorgensen, 2012). Moreover, we fall victim to this bias in our thoughts over and over again, despite repeated experiences that tell us "everything takes longer than we think it will."

Why are we subject to this kind of error? Research by social psychologists indicates that part of the answer involves a tendency to think about the future when we are estimating how long a job will take. This prevents us from remembering how long similar tasks took in the past, and that, in turn, leads us to underestimate the time we need now (Buehler, Griffin, & Ross, 1994). This is just one of the many ways in which we can—and often do—make errors in thinking about other people (and ourselves). Because we are prone to such errors in our thinking about the social world, we cannot rely on introspecting about the influences on us—or rely on common sense—to solve the mysteries of social behavior. Rather, we need scientific evidence about what *most* people do, whether they realize that they do so or not, and providing such evidence is, in essence, what social psychology is all about.

1.1.2: Social Psychology Focuses on the Behavior of Individuals

Societies vary greatly in terms of their overall levels of violence; yet, social psychology focuses on explaining why individuals perform aggressive actions or refrain from doing so. Such acknowledgment of cultural differences applies to virtually all other aspects of social behavior, from conformity to helping, love as well as conflict, but social psychology aims to address the thought and emotional processes underlying those actions in individuals. This means that, as we noted earlier, because none of us are "islands" and all of us, instead, are strongly influenced by other people and the situations we find ourselves in, much research will systematically examine cultural and other contextual factors to illuminate just how those influences are exerted on the individual.

Social psychologists examine *how* groups influence individual behavior, *how* culture becomes internalized and affects individual preferences, and *how* emotions and moods affect the decisions made by the individual. Although our emphasis will be on how social factors affect the individual, as you will see throughout this book, many

nonsocial factors (features of the environment; how the information we receive is framed) can exert powerful effects on us, often by influencing our emotions and social thoughts. The field's major interest lies in understanding just how social situations shape the actions of individuals.

Clearly, this does *not* mean the role that social and cultural factors play in shaping the individual is neglected. Far from it. For example, considerable research has begun to address how ethnicity and social class shape our "selves" (whether we construe it as independent from others or as interdependent with them) and, consequently, social behavior (Markus & Kitayama, 2010). This means that some institutional settings will be experienced as "friendly" or more congenial for one type of self rather than the other. Jiang (2016), for instance, examined how pre-service teachers in countries characterized by either collectivistic/interdependent (e.g., Singapore, Hong Kong, and Taiwan) or individualistic/independent (e.g., USA) values differed in the ways they attributed academic failure in students from lower socio-economic status. The study found that teachers from collectivistic cultures tended to attribute academic failure to individual differences and personal factors, such as intelligence and lack of motivation. On the other hand, teachers from individualistic countries attributed academic failure to contextual factors, such as family and community.

1.1.3: Social Psychology Seeks to Understand the Causes of Social Behavior

Social psychologists are primarily interested in understanding the many factors and conditions that shape the social thought and behavior of individuals—their actions, feelings, beliefs, memories, and judgments. Obviously, a huge number of variables can play a role, although most fall under the five major headings described here.

THE ACTIONS AND CHARACTERISTICS OF OTHER PERSONS Consider the following events:

You are at a party and you notice that a very attractive person is smiling at you. In fact, this person is looking at you in a way that leaves little room for interpretation: That person is sending a clear signal saying "Hey, you look good!" You return from class one day and as you approach the door to your dorm room you see a friend of yours is sitting on the floor looking very down. You stop to ask if she's ok, and you see that she's been crying.

Will these actions of others have any effect on your own emotions, thoughts, and behavior? Very likely. If you too are interested in potential romance, you may be very pleased when you see someone looking at you in a "let's get to know each other" kind of way, and you may then go over and say "Hi!" When you see that your friend has been crying, you are likely to ask "what happened?" and sit down to provide her with some comfort while you listen to her story. Instances like these, where we observe other people and respond to them, indicate that other people's emotional expressions often have a powerful impact upon us (see Figure 1.4).

In addition, we are also often affected by others' appearance. Be honest: Don't you behave differently toward highly attractive persons than toward less attractive ones? Toward very old people compared to young ones? Toward people who belong to your own ethnic group compared to ones different from your own? Your answer to these questions is probably "yes," because we do often react to others' visible characteristics, such as their appearance (McCall, 1997; Twenge & Manis, 1998). In fact, research findings (e.g., Hassin & Trope, 2000) indicate that we cannot ignore others' appearance even when we consciously try to do so. So despite warnings to avoid "judging books by their covers," we are often strongly affected by other people's group memberships as indicated by appearance—even if we are unaware of such effects and might deny

Figure 1.4 When Other People Communicate Their Emotions, We Respond

We are often affected by others people's expression of emotions. Even though in one case the person is expressing positive emotion toward us and in the other the person is expressing negative feelings, in both these instances we may be motivated to approach the other person.





their existence (see Chapters 6 and 7). Interestingly, research findings indicate that relying on others' appearance as a guide to their characteristics is not always wrong; in fact, they can be relatively accurate, especially when we can observe others behaving spontaneously, rather than in posed photos (Nauman, Vazire, Rentfrow, & Gosling, 2009).

COGNITIVE PROCESSES Suppose that you have arranged to meet a friend, and this person is late. In fact, after 30 minutes you begin to suspect that your friend will never arrive. Finally, they do appear and say "Sorry . . . I forgot all about meeting you until a few minutes ago." How will you react? Probably you will feel some annoyance. Imagine that instead, however, your friend says "I'm so sorry to be late. . . . There was a big accident, and the traffic was tied up for miles." Now how will you react? Perhaps you'll fell less annoyance—but not necessarily. If your friend is often late and has used this excuse before, you may be suspicious about whether this explanation is true. In contrast, if this is the first time your friend has been late, or if your friend has never used such an excuse in the past, you may accept it as true. In other words, your reactions in this situation will depend upon your memories of your friend's past behavior and your inferences about whether their explanation is really true. Situations like this one call attention to the fact that cognitive processes play a crucial role in social behavior. We try to make sense of people in our social world by attributing their actions to something about them (e.g., their traits) or something about the circumstances (e.g., unforeseeable traffic). This means we engage in lots of social cognition—thinking long and hard about other people—what they are like, why they do what they do, how they might react to our behavior, and so on (Shah, 2003). Social psychologists are well aware of the importance of such processes and social cognition is a very important area of research (Fiske, 2009).

ENVIRONMENTAL VARIABLES: IMPACT OF THE PHYSICAL WORLD Do we become more irritable and aggressive when the weather is hot and steamy than when it is cooler and more comfortable (Bell, Greene, Fisher, & Baum, 2001; Rotton & Cohn, 2000)? Does exposure to a pleasant smell in the air make people more helpful to others (Baron, 1997)? Does simply seeing money—such as a picture of a dollar bill—interfere with our ability to enjoy small pleasures in life like the taste of chocolate (Quoidbach, Dunn, Petrides, & Mikolajczak, 2010)? Research findings indicate that aspects of the physical environment can indeed influence our feelings, thoughts, and behavior, so these variables, too, certainly fall within the realm of modern social psychology.

BIOLOGICAL FACTORS Is social behavior influenced by biological processes? In the past, most social psychologists might have answered no, and certainly not in any direct fashion. Now, however, some suggest that our preferences, emotions, and behaviors may be linked, to some extent, to our biological inheritance

(Buss, 2008; Schmitt, 2004)—although social experiences too have a powerful effect and may interact with genetic factors in generating the complex patterns of our social lives (Gillath, Shaver, Baek, & Chun, 2008).

In fact, it is becoming clear that the operation of these two factors—biology and social experience—is not unidirectional. Experiences of stress, especially early in life but also in adulthood as a function of exposure to various forms of trauma including political violence, can induce neurobiological changes that affect psychological wellbeing (Canetti & Lindner, 2015; Hertzman & Boyce, 2010; McInnis, McQuaid, Matheson, & Anisman, 2015). Indeed, there is now accumulating evidence that environmental factors and social experiences—through what is called *epigenetic processes*, where the operation of certain genes is turned on or off—can influence behavior, sometimes long after initial exposure (Spector, 2012).

The view that biological factors play an important role in social behavior has been emphasized among those who take an evolutionary psychology perspective (e.g., Buss, 2004; Buss & Shackelford, 1997). This branch of psychology suggests that our species, like all others, has been subject to the process of biological evolution throughout its history and that, as a result, we now possess a large number of evolved psychological mechanisms that help (or once helped) us to deal with important problems relating to survival.

Through the process of evolution, which involves the three basic components of variation, inheritance, and selection, such tendencies become part of our biological inheritance. Variation refers to the fact that organisms belonging to a given species vary in many different ways; indeed, such variation is a basic part of life on our planet. Human beings, as you already know, vary on what sometimes seems to be an almost countless number of dimensions. Inheritance refers to the fact that some of these variations can be passed from one generation to the next through complex mechanisms that we are beginning to understand only now. Selection refers to the fact that some variations give the individuals who possess them an "edge" in terms of reproduction: They are more likely to survive, find mates, and pass these variations on to succeeding generations. The result is that over time, more and more members of the species possess these variations. This change in the characteristics of a species over time—immensely long periods of time—is the concrete outcome of evolution. (See Figure 1.5 for a summary of this process.)

Social psychologists who adopt the evolutionary perspective suggest that this process applies to at least some aspects of social behavior. For instance, consider

the question of mate preference. Why do we find some people attractive? According to the evolutionary perspective because the characteristics they show—symmetrical facial features; well-toned, shapely bodies; clear skin; lustrous hair—are associated with "good genes," they are likely to indicate that the people who possess them are healthy and vigorous and therefore good mates (Schmitt & Buss, 2001; Tesser & Martin, 1996). For instance, these characteristics—the ones we find attractive—potentially indicate that the persons who show them have strong immune systems that protect them from many illnesses (Li & Kenrick, 2006). Presumably, a preference for characteristics associated with good health and vigor among our ancestors increased their chances of successfully reproducing; this, in turn, could have contributed to our preference for people who possess these aspects of appearance.

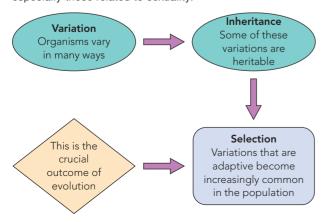
Is there any reason to suppose that evolution might favor different behaviors for men and women? When asked to indicate the characteristics in potential romantic part-

Evolutionary Psychology

A new branch of psychology that seeks to investigate the potential role of genetic factors in various aspects of human behavior

Figure 1.5 Evolutionary Psychology Perspective

Evolution involves three major components: variation, inheritance, and selection. Social psychologists who are guided by this perspective are particularly interested in features that might account for gendered behavior, especially those related to sexuality.



ners that they find desirable, both genders—but especially women—rate a sense of humor high on the list (e.g., Buss, 2008). From an evolutionary point of view, a sense of humor might signal high intelligence, which would make humorous people attractive (Griskevicius et al., 2009). Another possibility is that a sense of humor signals something else: interest in forming new relationships. Humor might signal that the person is available—and interested. Research by Li and colleagues (2009) found that people are more likely to use humor and laugh when they find another person attractive than when they do not. An international study showed that both homosexual and heterosexual males and females ranked humor as one of the most important traits when considering a potential romantic partner (Lippa, 2007). Even in dating sites, humor plays a role: On Tinder, one of the world's largest dating applications, female users who found someone's online profile attractive reported stronger intentions to date them if the profile included humorous lines (see Figure 1.6).

Other topics have been studied from the evolutionary perspective (e.g., helping others; aggression; attraction), and we'll describe this research in other chapters. Here, we wish to emphasize the following fact: The evolutionary perspective does not suggest that we inherit specific patterns of social behavior; rather, it contends that we inherit tendencies or predispositions that may be apparent in our overt actions, depending on the environments in which we live. Similarly, this perspective does not suggest that we are "forced" or driven by our genes to act in specific ways. Rather, it merely suggests that because of our genetic inheritance, we have tendencies to behave in certain ways that, at least in the past, may have enhanced the chances that our ancestors would survive and pass their genes on to us. These tendencies, can be—and often are—overridden by cognitive factors and the effects of experience (Pettijohn & Jungeberg, 2004). For instance, what is viewed as attractive changes over time and is often very different in diverse cultures. So yes, genetic factors play some role in our behavior and thought, but they are clearly only one factor among many that influence how we think and act.

Figure 1.6 Humor: An Important "Plus" in Dating

Research findings indicate that humor is viewed as a desirable characteristic in potential romantic partners, partly because it is perceived as a sign that the person is interested in forming a new relationship. Such effects occur in many situations, including dating. So, if you want romantic partners, keep on smiling and make jokes.



1.1.4: The Search for Basic Principles in a Changing Social World

One key goal of science is the development of basic principles that are accurate regardless of when or where they are applied or tested. Social psychologists seek to uncover the basic principles that govern social life. For instance, they'd like to determine what factors influence attraction, helping, obedience, the attitudes we form, and so on. The research they conduct is aimed to yield such knowledge—basic principles that will be true across time and in different cultures.

On the other hand, social psychologists recognize that cultures differ greatly and that the social world in which we live is constantly changing—in very important ways. For instance, cultures vary greatly with respect to how open they may be toward certain social issues, such as interracial dating and marriages. In the popular comedy My Big Fat Greek Wedding, an American man falls in love with and eventually marries an American-born woman who has Greek origins. Her Greek father strongly opposes their relationship because the potential groom is a "Xeno" (Greek for foreigner). Eventually the couple marries and lives a happy life, and the cultural differences between the families are gradually toned down (see Figure 1.7). Similarly, research has shown that Chinese Canadian males displayed a less positive attitude toward interracial dating, as compared to European Canadians (Uskul, Lalonde, & Cheng, 2007).

Cultures differ tremendously in these and countless other ways, and this complicates the task of establishing general principles of social behavior and social thought. Should we try to compliment another person to make them like us? This is an ingratiation tactic that has been found to be generally effective in individualistic cultures. Yet, research has revealed that because people from some cultures value independence (being seen as unique and separate from others) while others value interdependence (being seen as similar to and connected to others), responses to such seemingly positive treatment depends on whether it implies the person is different or the same as other members of their group (Siy & Cheryan, 2013). So, for example, people from certain cultures respond more negatively to treatment that implies they are different

Figure 1.7 Cultures Differ in Many Ways—Including the Attitude Toward Social Issues Like Interracial Dating and Marriage

The popular comedy My Big Fat Greek Wedding portrays the cultural differences between the families when an American man falls in love with and eventually marries an American-born woman with Greek origins.



from other group members, whereas those from other cultures respond more negatively to treatment that implies they are the same as other group members.

In addition, within a culture, how we interact with each other can change across time. Because of social media, and digital technology more generally, people now meet potential romantic partners in different ways than in the past when, typically, they were introduced by friends or met at dances arranged by their schools, churches, or other social organizations. Does this mean that the foundations of attraction are different today than in the past? Social psychologists believe that despite these changes, the same basic principles apply: Physical attractiveness is still a basic ingredient, even though what is deemed attractive may differ across time. Likewise, the basic principles of persuasion too remain much the same, even if messages aimed at influencing us are delivered in a different format (e.g., electronically) than in the past (e.g., print). In short, although the task of identifying basic, accurate principles of social behavior and social thought is complicated by the existence of cultural differences and rapid changes in social life, the goals of social psychological research remain the same: uncovering basic, accurate knowledge about the social side of life that applies in a wide range of contexts and situations.

In summary, social psychology focuses mainly on understanding the causes of social behavior—on identifying factors that shape our feelings, behavior, and thought in social situations. It seeks to accomplish this goal through the use of scientific methods, and it takes careful note of the fact that social behavior is influenced by a wide range of social, cognitive, environmental, cultural, and biological factors. The remainder of this text is devoted to describing some of the key findings of social psychology. We're certain that you will find it fascinating—after all, it is about *us* and the social side of *our* lives! We're equally sure that you will find the outcomes of some research surprising and that it may challenge many of your ideas about people and social relations. We predict that after reading this book, you'll never think about the social side of life in quite the same way as before.

1.2: Social Psychology: Advances at the Boundaries

Objective Examine the major avenues that social psychology is currently exploring

Textbooks, like fine wine, don't necessarily improve with age. So, to remain current, they must keep pace with changes in the fields they represent. Making certain that this book is current, in the best sense of this term, is one of our key goals. You can be sure that the research presented in the chapters that follow is a contemporary view of social psychological knowledge concerning the social side of life. Consistent with this goal, we will now describe several major trends in modern social psychology—themes and ideas that you will see throughout this text because they represent what is of central focus to social psychology.

1.2.1: Cognition and Behavior: Two Sides of the Same Social Coin

In the past, social psychologists could be divided into two distinct groups: those who were primarily interested in social *behavior*—how people act in social situations, and those who were primarily interested in social *thought*—how people attempt to make sense of the social world and to understand themselves and others. In modern social psychology, behavior and cognition are seen as intimately, and continuously, linked. In other words, there is virtually universal agreement in the field that we cannot hope

to understand how and why people behave in certain ways in social situations without considering their thoughts, memory, intentions, emotions, attitudes, and beliefs. Similarly, virtually all social psychologists agree that there is a complex interplay between social thought and social behavior. What we think about others influences our actions toward them, and the consequences of these actions then affect our emotions and social thought. So, in trying to understand the social side of life, modern social psychology integrates both. That will be our approach throughout the book, and it will be present in virtually every chapter.

1.2.2: The Role of Emotion in the Social Side of Life

Can you imagine life without emotions? Probably not, because life without feelings would be missing a lot and not reflect humans as we know them. Social psychologists have always been interested in emotions and moods, and with good reason: They play a key role in many aspects of social life. For instance, imagine that you want a favor from a friend or acquaintance—when would you ask for it, when this person is in a good mood or a bad one? Research findings indicate that you would do much better when that person is in a good mood, because positive moods (or affect as social psychologists term such feelings) do increase our tendency to offer help to others (e.g., Isen & Levin, 1972). Similarly, suppose you are meeting someone for the first time—do you think your current mood might influence your reactions to this person? If you answered "yes," you are in agreement with the results of systematic research, which indicates our impressions of others (and our thoughts about them) are influenced by our current moods. More recently, social psychologists have been investigating the role of moods in a wide range of social behaviors (Forgas, Baumeister, & Tice, 2009), and overall, interest in this topic, including the impact of specific emotions, has increased. So, we include it here as another area in which rapid advances are being made at the boundaries of our current knowledge of social life.

1.2.3: Social Relationships: How Important They Are for Well-Being

If the social side of life is as important as we suggested at the start of this chapter, then relationships with others are its building blocks. When they are successful and satisfying, they add tremendously to our happiness, but when they go wrong, they can disrupt every other aspect of our lives and undermine our psychological health and well-being (Slotter, Gardner, & Finkel, 2010). Because our connections to others are so critical, social psychologists have sought to understand the nature of social relationships—how they begin and change over time, and why, gradually, some strengthen and deepen, while others weaken and end-often, causing tremendous pain to the people involved. We'll consider relationships in detail in Chapter 7, but here, to give you the flavor of this growing body of knowledge, we'll mention just a couple of lines of important and revealing research.

One such topic relates to the following question: "Is it better, in terms of building a strong relationship, to view one's partner (boyfriend, girlfriend, or spouse) realistically, or as we often do, through "rose-colored glasses"? Folklore suggests that "love is blind," and when in love, many people do tend to see only good in their partners (see Figure 1.8). Is that tendency good or bad for their relationships? Research findings suggest that in general, it is good, but only if it is restrained by a healthy degree of reality (i.e., accuracy; Fletcher, Simpson, & Boyes, 2006). Positivity and perceived similarity between partners contributes to happiness, but accuracy does too.

Figure 1.8 The Warm Glow of Love

When couples are in love, they often perceive each other in unrealistically favorable ways. Is that good or bad for their future relationship? The answer is complex, but research findings indicate that as long as they show some degree of reality or accuracy, it may be beneficial.



Many other types of social relationships are also important for people's well-being. In fact, in the Western world, more people now spend a greater proportion of their lives living alone than ever before and people who choose to remain single are often just as happy as those who marry (DePaulo, 2008; Klinenberg, 2012). How can that be—if relationships are crucial to well-being? Research findings reveal that it is because single people often contribute more to their communities (by volunteering), they have more friends, and, crucially, they often belong to more groups. Belonging to multiple social groups that the individual values not only predicts better psychological well-being, but those who do so live longer than those who belong to few social groups (Holt-Lunstad, Smith, & Layton, 2010; Jetten et al., 2015; Putnam, 2000). Not only do the groups we belong to become an important part of "who we are," but they provide important psychological resources such as social support, which, as you'll see in Chapters 11 and 12, helps people to cope with adversity. When you came to college, did you join a sorority or fraternity, connect with others in your dorm, or perhaps even take part in your campus Psychology Club? If you did, as shown in Figure 1.9, being part of such groups can help boost self-esteem.

1.2.4: Social Neuroscience: The Intersection of Social Psychology and Brain Research

In a basic sense, everything we do, feel, imagine, or create reflects activity within our brains. Reading and understanding the words on this page is the result of activity in your brain. Are you in a good mood? Whatever you are feeling also reflects activity in your brain and biological systems. How do you know who you are? Can you remember your best friend in school? How your first ride on a roller coaster felt? Do you have plans for the future—and do you believe you can actually achieve them? All of these memories and experiences are the result of activity in various areas of your brain.

Figure 1.9 Togetherness: Being Part of Groups Is Important for Well-Being Connections to others that are gained by being part of different social groups is not only emotionally stimulating when the interaction is occurring but research findings indicate that when internalized as part of ourselves - our identities - they have the potential to boost self-esteem



In the past 20 years, powerful new tools for measuring activity in our brains as they function have been developed. Although they were initially developed for medical uses and have generated major advances in surgery by helping to illuminate abnormalities, as shown in Figure 1.10, magnetic resonance imaging (fMRI), PET scans, and other techniques have also allowed psychologists and other scientists to peer into the human brain as people engage in various activities, and so find out just what's happening at any given time. The result is that we now know much more about the complex relationships between neural events and psychological ones—feelings, thoughts, and overt actions.

Social psychologists, too, have begun to use these new tools to uncover the foundations of social thought and social behavior—to find out what portions of the brain and what complex systems within it are involved in key aspects of our social life everything from prejudice and aggression, through under-performing on tasks due to "choking under pressure" (Mobbs et al., 2009), and empathy and helping (Van Berkum, Holleman, Nieuwland, Otten, & Murre, 2009). In conducting such research, social psychologists use the same basic tools as other scientists—they study events in the brain and even changes in the immune system (Taylor, Lerner, Sherman, Sage, & McDowell, 2003) in order to determine how these events are related to important social processes. The findings of this research have been truly fascinating. Here's one example of what we mean.

Attitudes and values are an important part of the social side of life; as you'll see in Chapter 5, they often shape our overt behavior and underlie powerful emotional reactions to events and people. But how are they represented in the brain, and how do they exert their powerful effects on our behavior, thought, and emotions? Social neuroscience research is providing intriguing answers. For example, consider a study by Riddle and colleagues (2016). This investigation was designed to determine what happens in the brain of smokers who are exposed to pictorial health warning labels (HWLs), such as the ones shown on an average cigarette pack. Bear in mind that smoking tops the list of lifestyle factors that lead to early deaths that could be prevented, and claims more than 8 million lives every year around the world. Therefore, understanding how to help smokers quit smoking can potentially save thousands, if not millions, of lives. The researchers also wanted to find out whether the pattern of brain activation caused by the HWLs was associated with actual quitting of smoking a couple of weeks later.

The results showed that exposure to HWLs activated brain areas that are involved in both cognitive control and self-regulation (i.e., the ventro-medial pre-frontal cortex or vmPFC) and emotional processing (i.e., the amygdala). This brain activation was also significantly associated with biomarkers of smoking abstinence (i.e., expired carbon monoxide or CO in the smokers' breath) 2 weeks later. Thus, the results offered strong support for the idea that smokers respond to pictorial HWLs in a cognitive and affective manner, and that both cognitive control and emotions play a role in smoking cessation. This provides important insights to healthcare professionals, public health program designers, and others specialists working on smoking cessation, about the psychological mechanisms that underlie the motivation to quit smoking.

Here's another example of how social psychologists are using the tools of neuroscience to study important aspects of social thought and behavior. Have you heard of mirror neurons? They are neurons in our brains that are activated during the observation and execution of actions, and it has been suggested that they play a key role in empathy—our capacity to experi-

ence, vicariously, the emotions and feelings of other persons (Gazzola, Aziz-Zadeh, & Keysers, 2006; Iacoboni, 2009). Mirror neurons are located in a portion of the brain known as the frontal operculum, and in an intriguing study, Montgomery, Seeherman, and Haxby (2009) suggested that perhaps people who score high on a questionnaire measuring empathy would show more activity in this area of their brains when they viewed facial expressions of others.

To test this prediction, the researchers exposed two groups of individuals—ones who scored high or low on a measure of empathy (the capacity to take the perspective of other persons)—to video clips of others' facial expressions (e.g., smiling, frowning) or to faces that showed nonsocial movements (i.e., movements not associated with particular emotions). Activity in the brains of both groups of participants was recorded through fMRI scans. Results were clear: As predicted, persons high or moderate in empathy did indeed show greater activity in the frontal operculum (where mirror neurons are located) than persons low in empathy (see Figure 1.11).

Research in the rapidly expanding field of social neuroscience is at the forefront of advances in social psychology, and we will represent it fully in this text. We should insert one warning, however. As noted by several experts in this field (e.g., Cacioppo et al., 2003), social neuroscience cannot provide the answer to every question we have about

Figure 1.10 Peering Inside the Head with Magnetic Resonance **Imaging**

As illustrated here, advances in technology have allowed social psychologists to view blood flow changes in different regions of the brain as people process different types of information. This can provide information about the interplay between types of thought and brain activity.

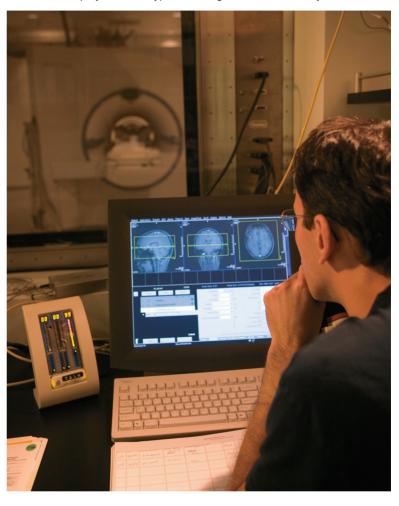
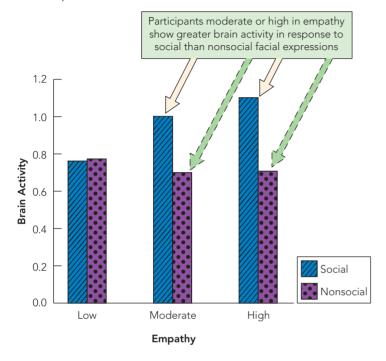


Figure 1.11 The Neural Basis of Empathy

Individuals high or moderate on a measure of empathy (the capacity to see the world through others' eyes) showed more activity in a portion of their brains (the frontal operculum) than persons low in empathy, when watching videos of other people displaying facial expressions. In contrast, the groups did not differ in brain activity while watching videos showing nonsocial facial movements (i.e., ones unrelated to emotions).



social thought or behavior. There are many aspects of social thought that cannot easily be related to activity in specific areas of the brain—including attributions, group identities, and reciprocity (e.g., Willingham & Dunn, 2003). In principle, all of these components of social thought reflect activity in the brain, but this does not necessarily mean that it is best to try to study them in this way. In fact, the situation may be similar to that existing between chemistry and physics. All chemists agree that ultimately, every chemical reaction can be explained in terms of physics. But the principles of chemistry are still so useful that chemists continue to use them in their research and do not all rush out and become physicists. The same may well be true for social psychology: It does not have to seek to understand all of its major topics in terms of activities in the brain or nervous system; other approaches that we will describe in later chapters are more useful in terms of providing important new insights. Throughout this book, therefore, we will describe research that uses a wide range of methods, from brain scans on the one hand to direct observations of social behavior on the other.

1.2.5: The Role of Implicit (Nonconscious) Processes

Have you ever had the experience of meeting someone for the first time and taking an immediate liking—or disliking—to that person? Afterward, you may have

wondered, "Why do I like (dislike) this person?" But probably, you didn't wonder for long because we are all experts at finding good reasons to explain our own actions or feelings. This speed in no way implies that we really do understand why we behave or think in certain ways. And, as you will see in Chapters 2 and 4, a growing theme of recent research in social psychology has been just this: In many cases we really don't know why we think or behave as we do in social contexts. And, partly because of errors in the way we process social information, and partly because we change greatly over time, we don't even know—with clarity—what will make us happy (Gilbert, 2006).

Indeed, our thoughts and actions are shaped by factors and processes of which we are only dimly aware, at best, and which often take place in an automatic manner, without any conscious thought or intention on our part. Consider for a minute whether you think men or women are more likely to be creative. Because this quality is deemed critical for many high-level positions, most people might be reluctant to overtly engage in gender stereotyping and state that, for example, "yes, I believe that men are more creative than women." To get at this question then, another approach is needed. Proudfoot, Kay, and Koval (2015) presented their participants with information about a male or female working in a traditionally masculine domain—architecture. After viewing the person's supposed work output—images of a building design—participants were simply asked to indicate how creative, original, and "outside-the-box" the work appeared to be. Despite the design being identical, when the name was female, it was seen as less creative than when the name was male. In another study, these investigators presented participants with information about a male or female manager who made "risky" business decisions or not. The male manager was rated as more creative when he made risky business choices than the female manager who made the same risky choices. This research clearly illustrates that gender role stereotypes influence the ways we form

impressions or make inferences about other people's traits and behavior. Rather than thinking systematically and rationally, we tend to apply rules-of-thumb and rely on biases, heuristics, and stereotypes when making social judgments. More research and applications about how such stereotypes and cognitive biases cloud our everyday judgments are discussed in more detail in Chapter 2.

Consider another example of the role of nonconscious processes, this time on first impressions. Research indicates that we form these incredibly quickly—often within mere seconds of meeting other people (Gray, 2008). Sometimes these first impressions are accurate, and sometimes they are very wrong (Carney, Colvin, & Hall, 2007). Do we know when our first impressions are likely to be accurate and when they are not? Evidence reported by Ames, Kammrath, Suppes, and Bolger (2010) indicates that we cannot intuit when these impressions are likely to be accurate and when they are not. So, nonconscious processes do influence our judgments and actions, but this occurs in ways that we often are unable to control, and they can lead us astray. Research on the role of implicit (nonconscious) processes in our social behavior and thought has examined many other topics, and we will examine them in several chapters since they represent an important focus of current research (see Chapters 2 and 6).

1.2.6: Taking Full Account of Social Diversity

There can be no doubt that the United States—like many other countries—is undergoing a major social and cultural transformation. 2012 figures indicate that 64 percent of the population identifies itself as white (of European heritage), while fully 36 percent identifies itself as belonging to another group (13 percent African American, 4.5 percent American Indian, 14 percent Hispanic, 4.5 percent Asian/Pacific Islander, and 7 percent some other group). Indeed, by 2050, European Americans will lose their numerical majority status (U.S. Census Bureau, Population Division, 2012). This represents a tremendous change from the 1960s, when approximately 90 percent of the population was of European descent.

In response to these tremendous shifts, psychologists have increasingly recognized the importance of taking cultural factors into account in everything they do—teaching, research, and therapy—and social psychologists are certainly no exception to this rule. They have been increasingly sensitive to the fact that individuals' cultural, ethnic, and racial heritage often plays a key role in their conceptions of themselves (e.g., identity), and this, in turn, exerts important effects on social thought and behavior. As a result, social psychology has adopted a **multicultural perspective**—one that recognizes the potential importance of gender, age, ethnicity, sexual orientation, disability, social class, religious orientation, and many other social group dimensions. This perspective has led to important changes in the focus of social psychological research, including how behavior changes depending on which of these category memberships is used to define the self at any given moment (see Chapter 4). Social diversity and its consequences for team performance, perceptions of inequality, and discrimination are major topics that we will cover in Chapters 2, 6, and 11.

Consider for a moment how culture might modify what is considered beautiful. In a study conducted in 10 different countries around the world, people indicated what kind of body shape they find most attractive in women (Swami et al., 2010). Participants were shown drawings of different body shapes and were asked to choose the one they found most attractive. Results indicated that there were indeed cultural differences in the ratings provided by participants: Raters in Oceania, South and West Asia, and Southeast Asia preferred heavier body types than those in North America and East Asia. However, larger differences occurred within those cultures in terms of socioeconomic status: Lower SES persons (i.e., those lower in education and income) preferred heavier body builds, as compared to those of higher SES status in Malaysia and South Africa, but not in central European countries (e.g., Austria).

Multicultural Perspective

A focus on understanding the cultural and ethnic factors that influences social behavior

Culture can also modify the ways people engage in online shopping. With the advent of the Internet and mobile communication, online shopping and electronic commerce have widely expanded over the last decade, even more so during the COVID-19 pandemic. Online shopping is inherently globalized and sometimes sellers and buyers come from totally different cultures. Levi and Gvili (2020) wanted to find out if cultural values (i.e., collectivism versus individualism) differentiated online shopping behavior with respect to price negotiations. The hypothesis was that people who espouse collectivistic cultural values are motivated to "save face" in public, as compared to those who espouse individualistic cultural values. One way to do so is to avoid paying a higher price than one should. For this reason, the motivation to "save face" may drive people with collectivist orientation to negotiate prices in an online shopping context in order to avoid paying more for a product that could be sold for less to another person. The researchers analyzed 498 eBay transactions involving either Russian or American buyers. (Previous research has shown that Americans score consistently higher in individualism than Russians.) The results of the study supported the hypothesis: Russians were more likely than Americans to engage in online price negotiation. Although the observed differences can have alternative explanations, the results support the idea that cultural orientation (individualism versus collectivism) can influence the way people engage with and experience online shopping. Clearly, cultures, including different social classes within cultures, can both enable and encourage people to experience the social world differently and increased recognition of this is a hallmark of modern social psychology. We will discuss research highlighting why and how culture matters for social thought and behavior at many points in this book.

1.3: How Social Psychologists Answer the Questions They Ask: Research as the Route to Increased Knowledge

Understand the methods social psychologists use to gain insight into the questions posed

Now that we've provided you with an overview of some of the current trends in social psychology, we can turn to the third major task mentioned at the start of this chapter: explaining how social psychologists attempt to answer questions about social behavior and social thought. Since social psychology is scientific in orientation, they usually seek to accomplish this task through systematic research. To provide you with the basic information about the specific techniques they use, we'll examine three related topics. First, we will describe basic *methods of research in social psychology*. Next we will consider the role of theory in such research. Finally, we'll touch on some of the complex ethical issues relating to social psychological research.

1.3.1: Systematic Observation: Describing the World Around Us

One basic technique for studying social behavior involves systematic observation—carefully observing behavior as it occurs. Such observation is not the kind of informal "people watching" we all practice from childhood onward; rather, in a scientific field such as social psychology it is observation accompanied by careful, accurate measurement of a particular behavior across people. Suppose that a social psychologist wanted to find out how frequently people touch each other in different settings. The researcher could study this topic by going to shopping malls, restaurants and bars, college campuses, and many other

Systematic Observation

A method of research in which behavior is systematically observed and recorded

locations and observe, in those settings, who touches whom, how they touch, and with what frequency. Such research (which has actually been conducted; see Chapter 3) would be employing what is known as *naturalistic observation*—observation of people's behavior in natural settings (Linden, 1992). Note that in such observation the researcher would simply record what is happening in each context; they would make no attempt to change the behavior of the persons being observed. In fact, such observation requires that the researcher take great pains to *avoid* influencing the people who are being observed in any way. Thus, the researchers would try to remain as inconspicuous as possible and might even try to hide behind natural barriers so as not to affect the behavior of the people they are watching.

Another technique that entails a form of systematic observation is known as the **survey method**. Here, researchers ask large numbers of persons to respond to questions about their attitudes or behavior. Surveys are used for many purposes—to measure attitudes toward specific issues such as marijuana use or abortion, to find out how voters feel about various political candidates, to determine how people feel about members of different social groups, and even to assess student reactions to professors (your college or university probably uses a form on which you rate your professor's teaching each semester). Social psychologists often use this method to assess attitudes toward a variety of social issues—for instance, gun control or affirmative action programs. Scientists and practitioners in other fields use the survey method to measure everything from life satisfaction around the globe to consumer reactions to new products.

Surveys offer several advantages. Information can be gathered about thousands or even hundreds of thousands of persons with relative ease, and the responses of different categories of people can be compared—say, do men and women differ in their attitudes toward same-sex marriages, public funding for care homes for the elderly, or their reported satisfaction with life? In fact, surveys are now often conducted online, through the Internet. Because, there are now more than 1.4 billion Facebook users worldwide, it is becoming an increasingly used platform for survey research. Respondents can click on the survey from within Facebook, and doing so allows the researchers to connect their survey self-reports with many types of personal attributes (e.g., gender, number of friends, demographic details, and personal interests such as movies and books) that are available for each user (Kosinski, Matz, Gosling, Popov, & Stillwell, 2015).

The Values in Action (VIA) Character Strength Survey is used across different countries to help people from different cultures and backgrounds identify their character strengths (see Figure 1.12). To take a look at how it works, just visit www viacharacter.org for an example. The VIA Character Strength Survey presented there is a reliable and valid research instrument that has been prepared by expert scientists, and your replies—which are entirely confidential—will help you identify your most important (or "signature") character strengths.

In order to be useful as a research tool, though, surveys must meet certain requirements. First, the persons who participate must be *representative* of the larger population about which conclusions are to be drawn—which raises the issue of *sampling*. If this condition is not met, serious errors can result. Suppose that a researcher, who is interested in finding out how many university students experience loneliness, administers surveys to students who have enrolled in the university counseling services to cope with feelings of loneliness and depression (a common psychological outcome of loneliness). Or, conversely, suppose the loneliness survey is completed mostly by highly sociable and happy students. Any results obtained would be questionable for describing the true prevalence of loneliness among university students, because they would not represent the entire range of loneliness experiences in the population as a whole.

Survey Method

A method of research in which a large number of people answer questions about their attitudes or behavior

Figure 1.12 Using the Internet to Conduct Research

Social psychologists sometimes collect survey data from sites they establish on the Internet. Many of these are set up for a specific study, but others, like the one shown here, remain open permanently and often provide data collected from hundreds of thousands of people.



Yet another issue that must be carefully addressed with respect to surveys is this: The way in which the items are worded can exert strong effects on the outcomes obtained. For instance, let's say that we want to find out how happy university students are and for this reason we administer a survey that asks students to rate, "How happy are you in your life right now?" (on a 7-point scale where 1 = very unhappy and 7 = very happy). Many students might well answer 4 or above because overall, most people do seem to be relatively happy much of the time. But suppose the question asked: "Compared to the happiest you have ever been, how happy are you in your life right now?" (1 = much less happy; 7 = just as happy). In the context of this comparison to your peak level of happiness, many students might provide numbers lower than 4, because they know they have been happier sometime in the past. Comparing the results from these questions could be misleading, if the difference in wording between them were ignored.

In sum, the survey method can be a useful approach for studying some aspects of social behavior. Surveys are especially useful for capturing large samples, the questions concern topics people can easily report on, and they concern behaviors that might otherwise be difficult to learn about. However, the results obtained are accurate only to the extent that issues relating to sampling and wording are carefully addressed.

1.3.2: Correlation: The Search for Relationships

At various times, you have probably noticed that some events appear to be related to the occurrence of others: As one changes, the other changes, too. For example, perhaps you've noticed that people who drive new, expensive cars tend to be older than people who drive old, inexpensive ones or that people using social media such as Facebook tend to be relatively young (although this is now changing). When two events or attributes (age of person and age of car) are related in this way, they are said to be *correlated* or that a correlation exists between them. The term *correlation* refers to a tendency for one event to be associated with changes in the other. Social psychologists refer to such changeable aspects of the natural world as *variables*, since they can take different values.

From a scientific point of view, knowing that there is a correlation between two variables can be very useful, and it is the primary aim of many survey studies. When a correlation exists, it is possible to predict one variable from information about the other variable. The ability to make such *predictions* is one important goal of all branches of science, including social psychology. Being able to make accurate predictions can be very helpful. For instance, imagine that a correlation is observed between the amount of money people donate to charity (one variable) and how happy they are (another variable). Although there are many reasons why this correlation might exist, it could be very useful for organizations seeking volunteers to highlight this potential well-being benefit of helping others. In fact, we do know that in countries where there is a stronger norm of providing help to others, the well-being of the population is greater (Oarga, Stavrova, & Fetchenhauer, 2015). This might suggest that strengthening this norm (i.e., "we're the kind of people who help each other") in communities will yield improvements in the happiness of members. Similarly, suppose that a correlation is observed between certain patterns of behavior in married couples (e.g., the tendency to criticize each other harshly) and the likelihood that they will later divorce. Again, this information might be helpful in counseling the persons involved and, perhaps, improving their relationships.

The stronger the correlation between two variables, the more accurate the prediction can be made. Correlations can range from 0 to –1.00 or +1.00; the greater the departure from 0, the stronger the correlation. Positive numbers mean that as one variable increases the other increases too. For example, people with higher scores in the so-called Dark Triad personality traits (i.e., Machiavellianism, narcissism, and psychopathy) have been found to rate sexist Twitter messages as funnier and more socially acceptable, indicating a positive correlation between the Dark Triad traits and ratings of sexist social media content (Lyons, Rowe, Waddington, & Brewer, 2021). Negative numbers indicate that as one variable increases, the other decreases. For instance, favorability ratings of a Tweet is negatively correlated with perceived Tweet rudeness, such that the more you find a Tweet favorable, the less likely you will think it contains rude elements.

These basic facts underlie an important method of research sometimes used by social psychologists: the **correlational method**. In this approach, social psychologists attempt to determine whether, and to what extent, different variables are related to each other. This involves carefully measuring each variable and then performing appropriate statistical tests to determine whether and to what degree the variables are related.

Imagine that a social psychologist wants to find out whether the information posted by users on Facebook is accurate—whether it portrays the users realistically, or presents them as they would like to be (an idealized self-image). Further, imagine that on the basis of previous studies, the researcher hypothesizes that the information people post on Facebook is indeed relatively accurate. How could this idea be tested? One very basic approach, using the correlational method of research, is as follows. First, posters on Facebook could complete measures of their personality (e.g., these

Correlational Method

A method of research in which a scientist systematically observes two or more variables to determine whether changes in one are accompanied by changes in the other

Hypothesis

An as yet unverified prediction concerning some aspect of social behavior or social thought

could include extraversion, conscientiousness, openness to experience—ones found to be important in past research). Then, raters would read the profiles on Facebook and from this information rate the posters on the same personality dimensions. As a cross-check, other people who know the posters well could also rate them on the same personality dimensions. Next, these sets of information would be compared (i.e., correlated) to see how closely they align. The higher the correlation between these ratings—the ones provided by the posters themselves and people who know them very well (i.e., self and other personality ratings)—the more accurate users of Facebook would appear to be in their self-presentations.

Because the ratings posted by people on Facebook agree with those provided by others who know them well, it suggests that there is accuracy. To test the alternative idea that posters try to present themselves in an idealized way, these individuals could be asked to describe their "ideal selves," and this information, too, could be correlated with others' ratings of their Facebook postings. These basic methods were actually used by Back et al. (2010) in a study designed to find out whether, and to what extent, Facebook postings are accurate with respect to posters' personality. Results offered clear support for the hypothesis that Facebook profiles are generally accurate: Posted profiles closely matched the posters' actual personalities, as measured by personality scales they themselves completed and ratings by friends and family members. There was little evidence for attempts at idealized self-presentation. On the basis of this research, we can tentatively conclude that Facebook information about posters' personality is relatively accurate; their personality scores predict their postings, and their postings predict their personality scores. But we emphasize the word *tentatively* here, for two important reasons.

First, the fact that two variables are correlated in no way guarantees that they are causally related—that changes in one cause changes in the other. On the contrary, the relationship between them may be due to the fact that both variables are caused by a third variable. For instance, in this case, it is possible that people who post on Facebook are simply good at self-presentation—presenting themselves to others so as to "look good." To the extent that's true, the correlation between their postings on Facebook and scores on personality tests could reflect this variable. Since they are high in self-presentation skills, their postings and their answers to personality tests both tend to put them in a good light. But, in fact, the two measures are unrelated to each in any direct or causal way.

There is still another complication: It is also possible that posting on Facebook leads to changes in posters' personalities, in the direction of becoming more like the information they posted. That may initially sound a little far-fetched, but we know that when people publicly make claims, they often convince themselves that it is true and, in fact, change to make it so (Higgins, 1999). Because this is a possible interpretation that correlational research cannot definitely rule out, we can only conclude that such relationships exist. Correlational research cannot establish the direction of the relationships between variables, or whether either variable causes the other.

Despite these major drawbacks, the correlational method of research is sometimes very useful to social psychologists. It can be used in natural settings where experiments might be very difficult to conduct, and it is often highly efficient: A large amount of information can be obtained in a relatively short period of time. However, the fact that it is generally not conclusive with respect to cause-and-effect relationships is a serious issue that leads social psychologists to prefer another method in many instances. It is to this approach—use of experiments—that we turn next.

1.3.3: The Experimental Method: Knowledge Through Systematic Intervention

As you have just seen, the correlational method of research is very useful from the point of view of one important goal of science: making accurate predictions. It is less useful, though, from the point of view of attaining another important goal: explanation.

This is sometimes known as the "why" question, because scientists do not merely wish to describe the world and relationships between variables in it: They want to be able to *explain* these relationships, too.

In order to attain the goal of explanation, social psychologists employ a method of research known as **experimentation** or the **experimental method**. Experimentation involves the following strategy: One variable is changed systematically, and the effects of these changes on one or more other variables are carefully measured. If systematic changes in one variable produce changes in another variable (and if two additional conditions we'll describe later in this chapter are also met), it is possible to conclude with reasonable certainty that there is indeed a causal relationship between these variables: that changes in one do indeed *cause* changes in the other. Because the experimental method is so valuable in answering this kind of question, it is frequently the method of choice in social psychology. But bear in mind that there is no single "best" method of research. Rather, social psychologists, like all other scientists, choose the method that is most appropriate for studying a particular topic.

EXPERIMENTATION: ITS BASIC NATURE In its most basic form, the experimental method involves two key steps: (1) The presence or strength of some variable believed to affect an aspect of social behavior is systematically changed, and (2) the effects of such changes (if any) are carefully measured. The factor systematically varied by the researcher is termed the **independent variable**, while the aspect of behavior studied is termed the **dependent variable**. In a simple experiment, then, different groups of participants are *randomly assigned* to be exposed to contrasting levels of the independent variable (such as low, moderate, and high). The researcher then carefully measures their behavior to determine whether it does in fact vary with these changes in the independent variable. If it does—and if two other conditions are also met—the researcher can tentatively conclude that the independent variable does indeed cause changes in the behavior being studied.

To illustrate the basic nature of experimentation in social psychology, we'll use the following example. Suppose that a social psychologist is interested in the following question: Does exposure to violent video games increase the likelihood that people will aggress against others in various ways (e.g., verbally, physically attacking them, spreading rumors, or posting embarrassing photos of them on the Internet; see Figure 1.13)? How can this possibility be investigated using the experimental method? Here is one possibility.

Participants in the experiment could be assigned at random to play a violent or non-violent video game. After doing so, they would be placed in a situation where they could, if they wished, aggress against another person. For instance, they could be told that the next part of the study is concerned with taste sensitivity and they could add as much hot sauce as they wish to a glass of water that another person will drink. Participants would taste a sample in which only one drop of sauce has been placed in the glass, so they would know how hot the drink would be if they added more than one drop. Lots of sauce would make the drink so hot that it would truly hurt the person who consumed it.

If playing aggressive video games causes increases in aggression against others, then participants who played such games would use more hot sauce—and so inflict more pain on another person—than participants who examined the puzzle. If results indicate that this is the case, then the researcher could conclude that playing aggressive video games *can* increase subsequent, overt aggression. The researcher can offer this conclusion because if the study was done correctly, the only difference between the experiences of the two groups during the study is that one played violent games and the other did not. As a result, any difference in their behavior (in their aggression) can be attributed to this factor. It is important to note that in experimentation, the independent variable—in this case, exposure to one or another type of video game—is systematically changed by the researcher. In the correlational method, in contrast, variables are *not* altered in this manner; rather, naturally occurring changes in them are simply observed and recorded.

Experimentation (Experimental Method)

A method of research in which one or more factors (the independent variables) are systematically changed to determine whether such variations affect one or more other factors (dependent variables)

Independent Variable

The variable that is systematically changed (i.e., varied) in an experiment

Dependent Variable

The variable that is measured in an experiment

Figure 1.13 The Experimental Method: Using It to Study the Effects of Violent Video Games

Does playing violent video games, such as the one shown here, increase the tendency to aggress against others? Using the experimental method, social psychologists have gathered data to address this important issue - and in fact, found, violent video game playing does encourage aggressive responses.



Random Assignment of Participants to Experimental Conditions

A basic requirement for conducting valid experiments. According to this principle, research participants must have an equal chance of being exposed to each level of the independent variable

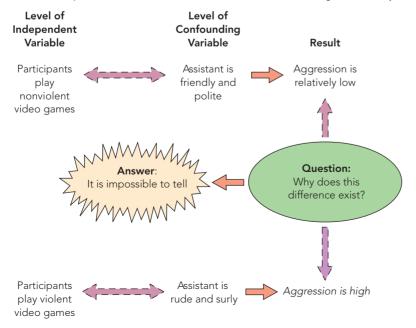
EXPERIMENTATION: TWO KEY REQUIREMENTS FOR ITS SUCCESS Earlier, we referred to two conditions that must be met before a researcher can conclude that changes in an independent variable have caused changes in a dependent variable. Let's consider these conditions now. The first involves what is termed random assignment of participants to experimental conditions. This means that all participants in an experiment must have an equal chance of being exposed to each level of the independent variable. The reason for this rule is simple: If participants are not randomly assigned to each condition, it may later be impossible to determine if differences in their behavior stem from differences they brought with them to the study, from the impact of the independent variable, or both. For instance, imagine that in the study on video games, all the persons assigned to the violent game come from a judo club—they practice martial arts regularly—while all those assigned to play the other game come from a singing club. If those who play the violent games show higher levels of aggression, what does this tell us? Not much! The difference between the two groups stem from the fact that individuals who already show tendencies toward aggression (they are taking a judo class) are more aggressive than those who prefer singing; playing violent video games during the study might be completely unrelated to this difference, which existed prior to the experiment. As result, we can't tell why any differences between them occurred; we have violated random assignment of persons to experimental treatments, and that makes the results virtually meaningless.

The second condition essential for successful experimentation is as follows: All factors other than the independent variable that might also affect participants' behavior must be held constant. To see why this is so, consider what will happen if, in the study on video games two assistants collect the data. One is kind and friendly, the other is rude and nasty. By bad luck, the rude assistant collects most of the data for the aggressive game condition and the polite one collects most of the data from the nonaggressive game condition. Again, suppose the results show that participants in the first group are more aggressive toward another person. What do the findings tell us? Again, virtually nothing, because we can't tell whether it was playing the aggressive video game or the rude treatment they received from the assistant that produced higher aggression. In situations like this, the independent variable is said to be *confounded* with another variable—one that is *not* under systematic investigation in the study. When such confounding occurs, the findings of an experiment may be largely uninterpretable (see Figure 1.14).

In sum, experimentation is, in several respects, the most powerful of social psychology's methods. In many ways, it is considered "the gold standard." But, it isn't perfect for example, since it is often conducted in laboratory settings that are quite different from the locations in which social behavior actually occurs, the question of external validity often arises: To what extent can the findings of experiments be generalized to real-life social situations and perhaps people who are rather different (e.g., older) from those who participated in the research? And there are situations where, because of ethical or legal considerations, experiments can't be used. For instance, it would clearly be unethical to expose research participants to television programming that may cause them to harm themselves. But in situations where it is appropriate and is used with skill and care, however, the experimental method can yield results that help us to answer complex questions about social thoughts and behavior. Overall, though, keep the following basic point in mind: There is no single best method of conducting research in social psychology. Rather, all methods offer advantages and disadvantages, so the guiding principle is that the method that is most appropriate to answering the questions being investigated is the one that should be used. And, when a set of studies uses rather different methods that have differing strengths and weaknesses but they all point toward the same conclusion, our confidence that the answer is correct will be higher.

Figure 1.14 Confounding of Variables: A Fatal Flaw in Experimentation

In a hypothetical experiment designed to investigate the effects of playing violent video games on aggression, the independent variable is confounded with another variable, the behavior of the assistants conducting the study. One assistant is polite and the other is rude. The polite assistant collects the data in the nonviolent game condition, while the rude assistant collects the data in the violent game condition. Findings indicate that people who play the violent video games are more aggressive. But, because of confounding of variables, it is impossible to tell whether this is a result of playing these games or the assistant's rude treatment. The experiment does not provide useful information on the issue it was designed to study.



Mediating Variable

A variable that is affected by an independent variable and then influences a dependent variable. Mediating variables help explain why or how specific variables influence social behavior or thought

Meta-Analysis

An average effect size observed across many studies is computed, permitting assessment of the strength of an effect. This allows for strong conclusions, in part because of the increased sample size and reduced error when many studies are combined

Moderators

Factors that are treated as independent variables and can change the size or even direction of a relationship between two variables. By comparing an effect or strength of a relationship under different conditions, knowledge of when and how effects emerge is gained, ensuring science is a cumulative enterprise

1.3.4: Further Thoughts on Causality: The Role of **Mediating Variables**

Earlier, we noted that social psychologists often use experimentation because it is helpful in answering questions about causality: Do changes in one variable produce (cause) changes in another? That is a very valuable kind of information to have because it helps us understand what situations lead to various outcomes—more or less helping, more or less aggression, more or less prejudice. Often, though, social psychologists take experimentation one step further in their efforts to answer the question "Why"—to understand why one variable produces changes in another. For instance, returning to the video game study described earlier, it is reasonable to ask: "Why does playing such games increase aggression?" Is it because it induces thoughts about harming others? Reminds people of real or imagined wrongs they have suffered at the hands of other people? Makes them feel less empathy for the victims harmed by aggression? Convinces them that aggression is "OK" since it leads to high scores in the game?

To get at this question of underlying processes, social psychologists often conduct studies in which they measure not just a single dependent variable, but other factors that they believe to be at work—factors that are influenced by the independent variable and then, in turn, affect the dependent measures. For instance, in this study, we could measure participants' thoughts about harming others and their beliefs about when and whether aggression is acceptable to see if these factors help explain why playing violent video games increases subsequent aggression. We could also measure the degree to which empathy is felt for someone who has been hurt to determine whether that helps explain the effect of playing violent video games on subsequent aggression. If they do, then they are termed mediating variables, ones that intervene between an independent variable (here, playing certain kinds of video games) and changes in social behavior.

1.3.5: Meta-Analysis: Assessing a Body of Knowledge

For many topics that we will be describing in depth, there is often a large and existing body of research. One way researchers assess the extent to which two variables are related when tested in a variety of settings, the strength of an intervention, or the relative accuracy of different theories in terms of their predictions concerning research outcomes is to conduct a meta-analysis of the studies that have been conducted (Chan & Arvey, 2012). Meta-analysis is a highly useful statistical technique that permits an assessment of how well findings replicate—whether the same pattern of results is obtained despite variation in how particular studies were conducted. It can also point to gaps in existing research and features of research settings that moderate the strength or even direction of effects obtained. Moderators are factors that can alter the effect of an independent variable on the dependent variable. Moderators can also affect the strength of a relationship between two variables. Let's take an example so you can see how effective metaanalysis can be in helping make sense of existing studies (some of which may seem to be conflicting) and ensuring our science is a cumulative enterprise.

There is a long-standing interest in the question of how a person's gender might influence the extent to which they provide help to a person in need. There have been many studies—and theories—suggesting one gender or the other is more helpful or prosocial than the other. Eagly and Crowley (1986) undertook a meta-analysis of all the existing experiments on helping, and this provided a great deal of conceptual order to this large literature. As they noted, many social psychological studies on helping had been conducted in the context of short-term encounters with strangers that often entailed some amount of physical risk (e.g., picking up hitchhikers) or competence (e.g., repairing flat tires). By describing the nature of the body of existing literature and revealing that studies with these characteristics did indeed find greater helping on the part of men than women, their meta-analysis did a great service to the field. These researchers pointed out that caring behaviors that are prescribed by the female gender role—helping others in close relationships—tended not to be studied so the overall gender difference in helping favoring men was highly misleading. The take-away message we offer you is that meta-analyses, whenever available, will be used to explain the findings of a large existing body of research. As we hope you can see, meta-analysis does more than just tell us what the effect is and its strength; it points to gaps and biases in the scientific literature itself.

1.4: The Role of Theory in Social Psychology

Objective Explain how theories play a key role in social psychological research

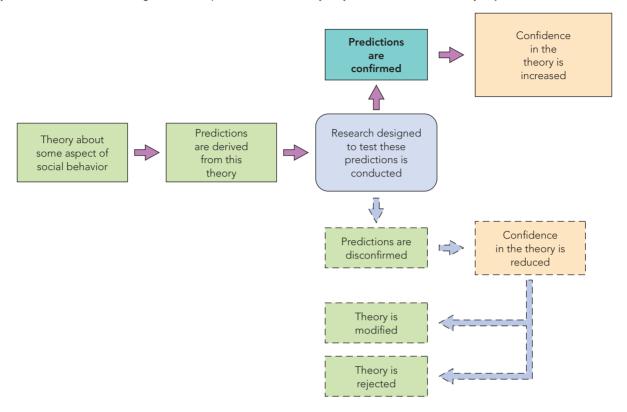
There is one more aspect of social psychological research we should consider before concluding. As we noted earlier, in their research, social psychologists seek to do more than simply describe the world: They want to be able to *explain* it too. For instance, social psychologists are not interested in merely stating that road traffic crashes are common in Southeast Asia. They want to be able to explain *why* some drivers are more risky (e.g., disregard the speed limit, ride motorbikes without wearing helmets) than others. In social psychology, as in all branches of science, explanation involves the construction of theories—frameworks for explaining various events or processes. The procedure involved in building a theory goes something like this:

- 1. On the basis of existing evidence, a theory consistent with this evidence is proposed.
- 2. This theory, which consists of basic concepts and statements about how these concepts are related, helps to organize existing information and makes predictions about observable events. For instance, the theory might predict the conditions under which individuals acquire racial prejudice and, on that basis, how it might be reduced.
- 3. These predictions, known as *hypotheses*, are then tested by actual research.
- 4. If results are consistent with the theory, confidence in its accuracy is increased. If they are not, the theory is modified and further tests are conducted.
- 5. Ultimately, the theory is either accepted as accurate or rejected as inaccurate. Even if it is accepted as accurate, however, the theory remains open to further refinement as improved methods of research are developed and additional evidence relevant to the theory's predictions is obtained.

This may sound a bit abstract, so let's turn to a concrete example. Suppose that a social psychologist formulates the following theory: When people believe that they hold a view that is in the minority, they will be slower to state it and this stems not from the strength of their views, but from reluctance to state minority opinions publicly where others will hear and perhaps disapprove of them for holding those views. This theory would lead to specific predictions—for instance, the minority slowness effect will be reduced if people can state their opinions privately (Bassili, 2003). If research findings are consistent with this prediction and with others derived from the theory, confidence in the theory is increased. If findings are *not* consistent with the theory, it will be modified or perhaps rejected. This process of formulating a theory, testing it, modifying the theory, testing it again, and so on lies close to the core of the scientific method, so it is an important aspect of social psychological research (see Figure 1.15).

Figure 1.15 The Role of Theory in Social Psychological Research

Theories both organize existing knowledge and make predictions about how various events or processes will occur. Hypotheses are logically derived from theories and are then tested through careful research. If results agree with the predictions, confidence in the theory is increased. If results disagree with the predictions, the theory may be modified or, ultimately, rejected as false.



Two final points: First, theories are never *proven* in any final, ultimate sense. Rather, they are always open to test, and are accepted with more or less confidence depending on the weight of available evidence. Second, research is not undertaken to prove a theory; it is performed to gather evidence relevant to the theory. If a researcher sets out to "prove" their pet theory, this is a serious violation of the principles of scientific skepticism, objectivity, and open-mindedness that were described earlier in this chapter.

1.5: The Quest for Knowledge and the Rights of Individuals: Seeking an Appropriate Balance

Identify how the dilemma of deception is addressed in social psychology

In their use of experimentation, correlation, and systematic observation, social psychologists do not differ from researchers in other fields. One technique, however, does seem to be unique to research in social psychology: deception. This technique involves efforts by researchers to withhold or conceal information about the purposes of a study from participants. The reason for doing so is simple: Many social psychologists believe that if participants know the true purposes of a study, their behavior in it will be changed by that knowledge. Thus, the research will not yield valid information about social behavior, unless deception is employed.

Some kinds of research do seem to require the use of temporary deception. For example, consider the video game study described earlier. If participants know that

Deception

A technique whereby researchers withhold information about the purposes or procedures of a study from people participating in it

the purpose of a study is to investigate the impact of violent games, they might lean over backward to avoid showing it. Similarly, consider a study of the effects of a person's gender on ratings of creativity or job performance. Again, if participants know that the researcher is interested in the impact of gender or likelihood of gender stereotyping, they might work hard to avoid being influenced by the person's gender. In this and many other cases, social psychologists feel compelled to employ temporary deception in their research (Suls & Rosnow, 1988). However, the use of deception raises important ethical issues that cannot be ignored.

First, there is the chance, however slim, that deception may result in some kind of harm to the persons exposed to it. They may be upset by the procedures used or by their own reactions to them. For example, in several studies concerned with helping in emergencies, participants were exposed to seemingly real emergency situations. For instance, they overheard what seemed to be a medical emergency—another person having an apparent seizure (Darley & Latané, 1968). Some participants were upset by these staged events, and others were disturbed by the fact that although they recognized the need to help, they failed to do so. Clearly, the fact that participants experienced emotional upset raises complex ethical issues about just how far researchers can go when studying even very important topics such as this one. Different countries around the world apply different regulations for safeguarding participants against physical and psychological and emotional harm. For example, the British Psychological Society's Code of Human Research Ethics specifies the rules and regulations that promote research integrity and protect both participants' and researchers' safety.

We should hasten to emphasize that such research represents an extreme use of deception: Generally, deception takes much milder forms such as withholding information about the true purposes of the study, what is referred to as *passive deception*. For example, in a study concerning impressions formed of persons with and without a physical disability, some participants might receive a photo of a person sitting in a wheelchair and others receive a photo of the same person without a wheelchair. With the goal of the study being to assess whether differential evaluations of the target person emerge depending on the presence of this disability cue or not; in passive deception studies, this purpose (i.e., the intention to compare these two conditions) is left unsaid.

Other forms of deception might involve providing *misleading information*. For instance, participants may receive a request for help from a stranger who is actually an assistant of the researchers, or they may be informed that most other students in their university hold certain views about a social issue when in fact they do not, or that is unknown. In other studies, experimenters may lead participants to believe that another person in the study has acted in a certain way (i.e., divided points or money in a bargaining game) when in fact a computer program is controlling what appears to be "the other person's responses." Although with this form of deception, where misleading information is presented, there is more potential for some kind of harmful effects to participants, these must be assessed against the scientific value of what might be learned from conducting the study.

Second, there is the possibility that participants will resent being "fooled" during a study and, as a result, they will acquire negative attitudes toward social psychology and psychological research in general; for instance, they may become suspicious about information presented by researchers (Kimmel, 2004). To the extent such reactions occur—and recent findings suggest they do, at least to a degree (Epley & Huff, 1998)—they have disturbing implications for the conduct of social psychology, which place so much emphasis on scientific research.

Because of such possibilities, the use of deception poses something of a dilemma to social psychologists. On the one hand, it seems essential to their research—to create an involving situation where the psychological processes of interest can be examined in a safe laboratory context. On the other, its use raises serious problems. How can this issue be resolved? Most social psychologists agree on the following points, and adhering to such guidelines is required by *university research ethics committees and boards* that monitor the conduct of research undertaken by university staff and students.

Informed Consent

A procedure in which research participants are provided with as much information as possible about a research project before deciding whether to participate in it

Debriefing

Procedures at the conclusion of a research session in which participants are given full information about the nature of the research and the hypothesis or hypotheses under investigation

First, deception should *never* be used to persuade people to take part in a study; withholding information about what will happen in an experiment or providing misleading information in order to induce people to take part in it is definitely not acceptable (Sigall, 1997). Second, most social psychologists agree that temporary deception may sometimes be acceptable provided two basic safeguards are employed. One of these is informed consent—giving participants as much information as possible about the procedures to be followed before they make their decision to participate. This is the opposite of withholding information in order to persuade people to participate. The second is careful **debriefing**—providing participants with a full description of the purposes of a study after they have participated in it, including an explanation of any deception used, and why it was necessary to employ it (see Figure 1.16).

Fortunately, existing evidence indicates that, together, informed consent and thorough debriefing can substantially reduce the potential dangers of deception (Smith & Richardson, 1985). For example, most participants report that they view temporary deception as acceptable, provided that potential benefits outweigh potential costs and if there is no other means of obtaining the information sought (Rogers, 1980; Sharpe, Adair, & Roese, 1992). Overall, then, it appears that most research participants do not react negatively to temporary deception as long as its purpose and necessity are subsequently made clear. However, this does not mean that the safety or appropriateness of deception should be taken for granted (Rubin, 1985; Weathington, Cunningham, & Pittenger, 2010). On the contrary, the guiding principles for all researchers planning to use deception should be the following: (1) Use deception only when it is absolutely essential to do so—when no other means for conducting the research exists; (2) always proceed with caution; and (3) make certain that every possible precaution is taken to protect the rights, safety, and well-being of research participants. In terms of the latter, universities in different countries of the world must have university research ethics committees or review boards to review the ethics of proposed research before it is conducted, including a cost–benefit analysis when deception is to be employed.

Figure 1.16 Careful Debriefing: A Requirement in Studies Using Deception After an experimental session is completed, participants should be provided with a thorough debriefing - full information about the experiment's goals and the reasons that temporary deception was considered necessary.



Chapter 1 Rapid Review

Learning Objectives

Key Points

EVALUATE THE DIVERSE TOPICS THAT SOCIAL PSYCHOLOGY SEEKS TO UNDERSTAND

- Social psychology is the scientific field that seeks to understand the nature and causes of individual behavior in social situations.
- It is scientific in nature because it adopts the values and methods used in the other fields of science.
- Social psychologists adopt the scientific method because "common sense" provides an unreliable guide to predicting social behavior and because our thought is influenced by many potential sources of bias.
- Social psychology focuses on the behavior of individuals and seeks to understand the causes of their emotions, thoughts, and social behavior. These can involve the behavior and appearance of others, environmental factors, cultural values, and even biological and genetic factors,
- · Research from an evolutionary psychology perspective emphasizes how natural selection may have encouraged particular behavioral tendencies, especially those related to mating and sexuality.
- Social psychology seeks to establish the basic principles that govern social life, despite cultural differences and rapid changes in technology that affect how social life unfolds.

EXAMINE THE MAJOR AVENUES THAT SOCIAL PSYCHOLOGY IS CURRENTLY EXPLORING

- Social psychology is the scientific branch of psychology that focuses on the social side of life.
- Social psychologists currently recognize that social thought and social behavior are two sides of the same coin, and that there is a continuous, complex interplay between them.
- There is growing interest among social psychologists in the role of emotion in social thought and social behavior.
- The importance of many types of social relationships is another major trend in the field.
- Yet another major trend involves growing interest in social neuroscience—efforts to relate activity in the brain to key aspects of social thought and behavior.
- Social behavior is often shaped by factors of which we are unaware. Growing attention to such implicit (nonconscious) processes is another major theme of modern social psychology.
- · Social psychology currently adopts a multicultural perspective. This perspective recognizes the importance of cultural factors in social behavior and social thought.

UNDERSTAND THE METHODS SOCIAL PSYCHOLOGISTS USE TO GAIN INSIGHT INTO THE QUESTIONS POSED

- With systematic observation, behavior is carefully observed and recorded. In naturalistic observation, such observations are made in settings where the behavior naturally occurs, without any intervention on the part of the researcher.
- Survey methods often involve large numbers of persons who are asked to respond to questions about their attitudes or behavior.
- When the correlational method of research is employed, two or more variables are measured to determine how they might be related to one another. Variables can be positively correlated such that as one increases the other also does, or they can be negatively correlated where increases in one variable correspond with decreases in the other.
- The existence of even strong correlations between variables does not indicate that they are causally related to each other.
- Experimentation involves systematically altering one or more variables (independent variables) in order to determine whether changes in this variable affect some aspect of behavior (dependent variables).
- Successful use of the experimental method requires random assignment of participants to conditions and holding all other factors that might also influence behavior constant so as to avoid confounding of variables.
- Although it is a very powerful research tool, the experimental method is not perfect; questions concerning the external validity—replication of findings across populations and settings—often arise. Further, it cannot be used in some situations because of practical or ethical considerations.
- Research designed to investigate mediating variables—by assessing the processes that may account for the effect of the independent variable on the dependent variable - adds to understanding of how specific variables influence social behavior.
- Meta-analysis is a statistical technique that permits an assessment of how well findings replicate whether the same pattern of results is obtained despite variation in how particular studies were
- Moderators are factors that can alter the effect of an independent variable on the dependent variable.

Chapter 1 Rapid Review (continued)

Learning Objectives

Key Points

EXPLAIN HOW THEORIES PLAY A KEY ROLE IN SOCIAL PSYCHOLOGICAL RESEARCH

- Theories are frameworks for explaining various events or processes. They play a key role in social psychological research.
- Hypotheses reflect definitive predictions about observable psychological events and processes.
- Empirical research is used to confirm or dismiss the hypotheses of a given theory. When the hypotheses are dismissed, the theory can be modified or rejected.
- Theories in social psychology are never proven in any final, ultimate sense. Rather, they are always open to test, and are accepted with more or less confidence depending on the weight of available evidence.
- Research is not undertaken to prove a theory; it is performed to gather evidence relevant to the theory.

IDENTIFY HOW THE DILEMMA OF DECEPTION IS ADDRESSED IN SOCIAL **PSYCHOLOGY**

- Deception involves efforts by social psychologists to withhold or conceal information about the purposes of a study from participants. It can entail passive deception where the true purpose of the research is not revealed, or presentation of misleading information about some aspect of the
- Most social psychologists believe that temporary deception is often necessary in order to obtain valid research results.
- However, they view deception as acceptable only when important safeguards are employed: informed consent and thorough debriefing.
- Different countries around the world apply different regulations for safeguarding participants against physical, psychological, and emotional harm. In universities, research ethics committees and boards are tasked with monitoring the conduct of research undertaken by university staff and students.

Critical Thinking Questions

- LO 1.1 Do you behave differently around certain friends or family members? What factors might influence the way you behave and feel?
- LO 1.2 Pick one of the avenues that social psychology is currently exploring and explain how it is relevant to your life.
- **LO 1.3** What are the techniques used to study social behavior? Provide examples for each technique to study a particular aspect of your environment.
- LO 1.4 Explain the role of social psychological research with the help of examples.
- LO 1.5 Describe your views on withholding or concealing information about the purposes of a study from participants. Do you think it is ethical? Explain your answer.

Self-Test

- 1. Which of the following statements is not true about social psychology?
 - a. Social psychology seeks to understand the nature and causes of individual behavior in social situations.
 - **b.** Social psychologists may use "common sense" to predict social behavior.
 - c. The causes of individual behavior may involve the presence of other people, environmental factors, and cultural values.
 - d. Social psychology aims to establish the basic principles that quide social behavior, despite cultural differences and rapid change in technology.
- 2. Which of the following factors are of interest to social psychologists?
 - a. Emotions
 - b. Memory and cognition
 - c. Attitudes
 - d. All of the above
- 3. The discipline that uses neuroscience methods to associate brain activity with key aspects of social thought and behavior is
 - a. cognitive neuroscience.
 - b. social neuroscience.

- c. affective neuroscience.
- d. behavioral neuroscience.
- 4. Which of the following is mostly true about implicit (nonconscious) processes?
 - a. Social behavior is often shaped by implicit (nonconscious) processes, and this area is of great interest to social psychologists.
 - **b.** Social behavior is often shaped by explicit (conscious) processes, and the role of implicit (nonconscious) processes is of interest only to cognitive psychologists.
 - c. Implicit (nonconscious) processes are difficult to establish and study, therefore are of little interest to social psychologists.
 - d. Implicit (nonconscious) processes have been discarded as an unimportant dimension of social behavior.
- 5. The perspective that recognizes the potential role of gender, age, ethnicity, sexual orientation, disability, social class, and religious orientation on social behavior is known as the
 - a. bio-psychological perspective.
 - b. social cognitive perspective.
 - c. multicultural perspective.
 - d. evolutionary perspective.

Answers: 1. b; 2. d; 3. b; 4. a; 5. c.