

Adjusting to Modern Life



THE PARADOX OF PROGRESS

REEL RESEARCH Online Relationships

THE SEARCH FOR DIRECTION

Self-Help Books

The Approach of This Textbook

THE PSYCHOLOGY OF ADJUSTMENT

What Is Psychology?

What Is Adjustment?

THE SCIENTIFIC APPROACH TO BEHAVIOR

The Commitment to Empiricism

Advantages of the Scientific Approach

Experimental Research: Looking for Causes

Correlational Research: Looking for Links

THE ROOTS OF HAPPINESS:

AN EMPIRICAL ANALYSIS

What Isn't Very Important?

What Is Somewhat Important?

What Is Very Important?

Conclusions

RECOMMENDED READING

Stumbling on Happiness by Daniel Gilbert

APPLICATION: IMPROVING ACADEMIC

PERFORMANCE

Developing Sound Study Habits

Improving Your Reading

Getting More out of Lectures

Applying Memory Principles

REVIEW

PRACTICE TEST



Barry Schwartz argues that people in modern societies suffer from choice overload. He maintains that the endless choices people are presented with lead them to waste countless hours weighing trivial decisions and ruminating about whether their decisions were optimal.

Counterpoint. *Although increased choice sounds attractive, recent research suggests that an overabundance of choices has unexpected costs.* Studies suggest that when people have too many choices, they experience “choice overload” and struggle with decisions (White & Hoffrage, 2009). Decision dilemmas can deplete mental resources and undermine self-control (Vohs et al., 2008). Furthermore, Schwartz (2004) argues that when decisions become more complex, errors are more likely. And he explains how having more alternatives increases the potential for rumination, postdecision regret, and anticipated regret. Ultimately, he argues, the malaise associated with choice overload undermines individuals’ happiness and contributes to depression. Consistent with this analysis, research data suggest that the incidence of depressive disorders has increased over the last 50 years (Hidaka, 2012). Average anxiety levels have also gone up substantially in recent decades (Twenge, 2000, 2011). It is hard to say whether choice overload is the chief culprit underlying these trends, but it is clear that increased freedom of choice has not resulted in enhanced tranquillity or improved mental health.

Point. *Modern technology has gradually provided us with unprecedented control over the world around us.* Advances in agriculture have dramatically increased food production, and biotechnology advocates claim that genetically modified crops will make our food supply more reliable than ever before. Elaborate water supply systems, made up of hundreds of miles of canals, tunnels, and pipelines, along with dams, reservoirs, and pumping stations, permit massive metropolitan areas to grow in inhospitable deserts. Thanks to progress in medicine, doctors can reattach severed limbs, use lasers to correct microscopic defects in the eye, and even replace the human heart.

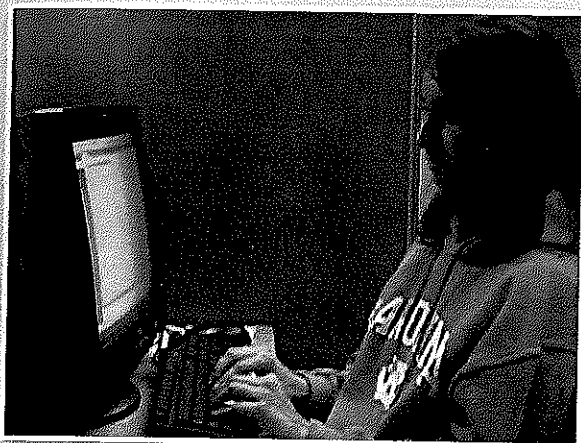
Counterpoint. *Unfortunately, modern technology has also had a devastating negative impact on our environment.* It has contributed to global warming, destruction of the ozone layer, deforestation, exhaustion of much of the world’s fisheries, widespread air and water pollution, and extensive exposure of plants and animals to toxic chemicals. Many experts worry that in a few generations the earth’s resources will be too depleted to sustain an adequate quality of life. To most people, these crises sound like technical problems that call for technological answers, but they are also behavioral problems in that they are fueled by overconsumption and waste (Koger & Winter, 2010; see the appendix on sustainability in the back of this book). In North America and Europe, the crucial problem is excessive consumption of the world’s natural resources. As Kitzes et al. (2008) put it, “If everyone in the world had an ecological footprint equivalent to that of the typical North American or Western European, global society would overshoot the planet’s biocapacity three to five fold” (p. 468).

All these apparent contradictions reflect the same theme: *The technological advances of the past century, impressive though they may be, have not led to perceptible improvement in our collective health and happiness.* Indeed, many social critics argue that the quality of our lives and our sense of personal fulfillment have declined rather than increased. This is the paradox of progress.

What is the cause of this paradox? Many explanations have been offered. Alvin Toffler (1980) attributes our collective alienation and distress to our being overwhelmed by rapidly accelerating cultural change. Robert Kegan (1994) maintains that the mental demands of modern life have become so complex, confusing, and contradictory that most of us are “in over our heads.” Tim Kasser (2002) speculates that excessive materialism weakens the social ties that bind us, stokes the fires of insecurity, and undermines our collective sense of well-being. Micki McGee (2005) suggests that modern changes in gender roles, diminished job stability, and other social trends have fostered an obsession with self-improvement that ultimately undermines many individuals’ sense of security and satisfaction with their identity. According to McGee, our “makeover culture” nourishes the belief that we can all reinvent ourselves as needed, but this assumption can create tremendous pressures on people that “foster rather than quell their anxieties” (p. 17). Sherry Turkle (2011) asserts that in our modern, digital, socially networked world, we spend more and more time with technology and less and less with each other. Although people pile up huge numbers of “friends” on Facebook, Americans report that they have fewer friends than ever before (Turkle, 2011). The resulting sense of loneliness and isolation just deepens people’s dependence on superficial communication in the online world, leaving an increasing number of people suffering from an intimacy deficit.

Online Relationships

Log on to CourseMate at www.cengagebrain.com to watch this video.



© Cengage Learning 2015



© Cengage Learning 2015

Across the world, people are increasingly interacting in online environments. On average, Americans spend a whopping 120 hours per month online (New Media Trend Watch, 2012). Although technological advances produce many benefits for human interaction, Internet-mediated rather than face-to-face communication has its drawbacks. Melanie Green, a social psychologist from the University of North Carolina explains what she characterizes as “Internet good” versus “Internet bad” and investigates the relationship between human behavior and Internet use in this thought-provoking video.

The purpose of Green’s research is to examine how Internet use affects social interaction. In one study, participants complete a survey that includes questions about life satisfaction and Internet use. The results showed some interesting patterns: Participants who use instant messaging (IM) frequently have lower life satisfaction and also report they use the Internet too much and would like to use it less. In another study, participants fill out a mood survey followed by a conversation with another “student”—either face to face or via IM. The dialogue is the same in either environment, controlled by the “student” experimenter, and participants are told that the study measures eye movements. The

findings reveal an interesting paradox, as 64% of the participants felt that the face-to-face conversations were more meaningful than the IM conversations—even though those who interacted with the experimenter over IM were reportedly happier than those who interacted with her face to face.

Watch the *Online Relationships* video to learn more about research on Internet use and social relationships. Delve even deeper by responding to the following discussion questions.

DISCUSSION QUESTIONS

1. How is your daily life affected by the Internet? Record the time you spend in front of a screen—television, cell phone, or computer—for a week and explain why you should or shouldn’t change your Internet behavior based on the results.
2. Why would the researcher mislead the participants by placing fake cameras in the room and telling them that the study involved eye-movement measurements?
3. What are some benefits of Internet-based communication? What are some trade-offs?

Whatever the explanation, many theorists, working from varied perspectives, agree that *the basic challenge of modern life has become the search for meaning, a sense of direction, and a personal philosophy* (Dolby, 2005; Emmons, 2003; Sagiv, Roccas, & Hazan, 2004). This search involves struggling with such problems as forming a solid

sense of identity, arriving at a coherent set of values, and developing a clear vision of a future that realistically promises fulfillment. Centuries ago, problems of this kind were probably much simpler. As we’ll see in the next section, today it appears that many of us are foundering in a sea of confusion.

THE SEARCH FOR DIRECTION

LEARNING OBJECTIVES

- Provide some examples of people's search for direction.
- Describe some common problems with self-help books and what to look for in quality self-help books.
- Summarize the philosophy underlying this textbook.

We live in a time of unparalleled social and technological mutation. According to a number of social critics, the kaleidoscope of change that we see around us creates feelings of anxiety and uncertainty, which we try to alleviate by searching for a sense of direction. This search, which sometimes goes awry, manifests itself in many ways.

For example, we could discuss how hundreds of thousands of Americans have invested large sums of money to enroll in "self-realization" programs such as Scientology, Silva Mind Control, John Gray's Mars and Venus relationship seminars, and Tony Robbins's Life Mastery seminars. These programs typically promise to provide profound enlightenment and quickly turn one's life around. Many participants claim that the programs have revolutionized their lives. However, most experts characterize such programs as intellectually bankrupt, and book and magazine exposés reveal them as simply lucrative money-making schemes (Behar, 1991; Pressman, 1993). In a particularly scathing analysis of these programs, Steve Salerno (2005) outlines the enormous financial benefits reaped by their inventors, such as Tony Robbins (\$80 million in annual income), Dr. Phil (\$20 million in annual income), and John Gray (\$50,000 per speech). In his critique, Salerno also attacks the hypocrisy and inflated credentials of many leading self-help gurus. For example, he asserts that John Gray's doctorate came from a nonaccredited correspondence college; that Dr. Phil has a history of alleged marital infidelity and that some of his video segments are contrived to a degree that would make Jerry Springer proud; and that Dr. Laura is "a critic of premarital and extramarital sex who's indulged in both" (2005, p. 44). More than anything else, the enormous success of these self-help gurus and self-realization programs demonstrates just how desperate some people are for a sense of direction and purpose in their lives.

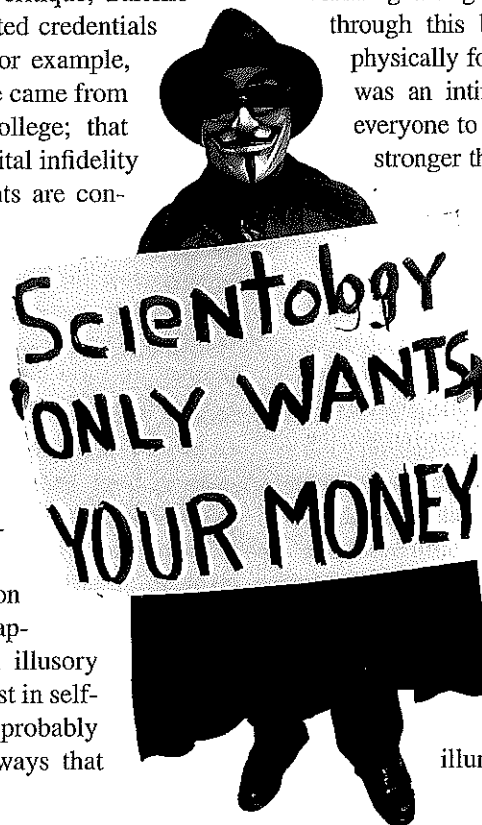
For the most part, self-realization programs are harmless scams that appear to give some participants an illusory sense of purpose or a temporary boost in self-confidence. But in some cases they probably lead people down ill-advised pathways that

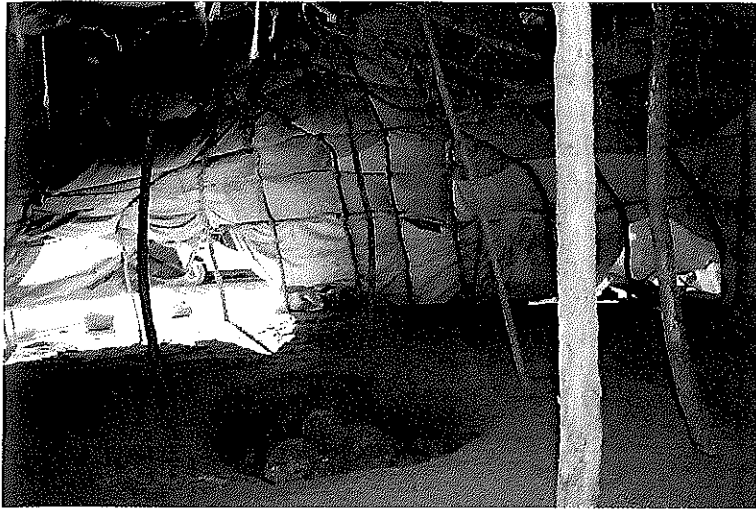
prove harmful. The ultimate example of the potential for harm unfolded in October 2009 in Sedona, Arizona, where three people died and eighteen others were hospitalized, many with serious injuries, after participating in a "spiritual warrior" retreat that required them to spend hours in a makeshift sweat lodge (Harris & Wagner, 2009). The retreat was run by James Ray, a recently popular self-help guru whose website promises to teach people "how to trigger your Unconscious Mind to automatically increase your level of wealth and fulfillment." Ray, who has written inspirational books and appeared on popular TV talk shows, has built a \$9-million-a-year self-help empire. The fifty to sixty people who participated in his ill-fated retreat paid over \$9,000 apiece for the privilege. After spending 36 hours fasting in the desert on a "vision quest," they were led into a tarp-covered sweat lodge for an endurance challenge that was supposed to show them that they could gain confidence by conquering physical discomfort (Kraft, 2009).

Unfortunately, the sweat lodge turned out to be poorly ventilated and overheated, so that within an hour people began vomiting, gasping for air, and collapsing. Undaunted, Ray urged his followers to persevere, telling them that the vomiting was good for them and saying, "You have to go through this barrier" (Doughtery, 2009). No one was physically forced to stay (and a few did leave), but Ray was an intimidating presence who strongly exhorted everyone to remain, so they could prove that they were stronger than their bodies. Tragically, he pushed their

bodies too far; by the end of the ceremony many of the participants were seriously ill. Yet, according to one account, "At the conclusion, seemingly unaware of the bodies of the unconscious lying around him, Ray emerged triumphantly, witnesses said, pumping his fist because he had passed his own endurance test" (Whelan, 2009).

Some of the aftermath of this event has also proven revealing. Consistent with the assertion that it really is all about the money, Ray provided a *partial* refund to the family of Kirby Brown, a participant who *died* in the sweat lodge (Martinez, 2009). And the reactions of some of Ray's followers after the sweat lodge tragedy have been illuminating. You might think that, after inad-





AP Photo/Vapapai County Sheriff's Office

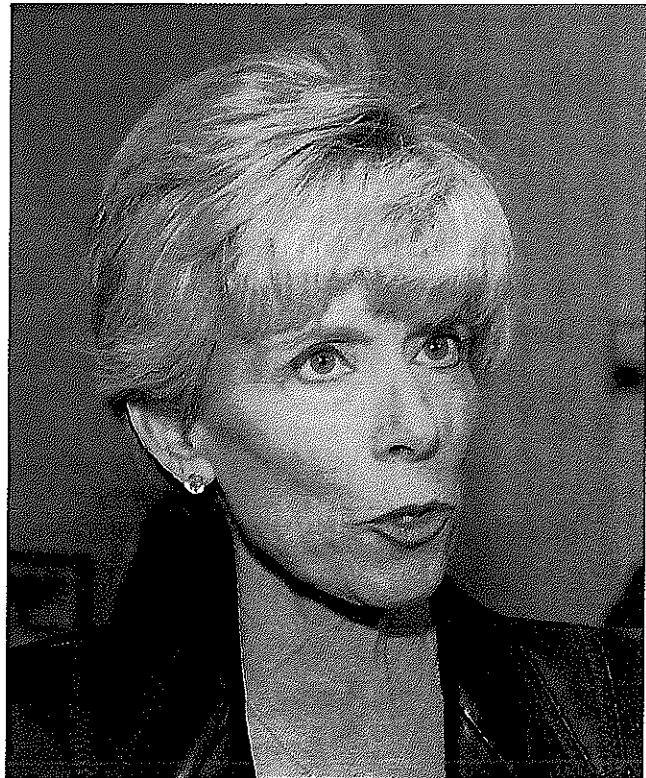
The inside of the tarp-covered sweat lodge in Sedona that proved to be a death trap for three participants in an endurance challenge can be seen here. James Ray, the self-help guru who organized the event, was arrested in February 2010 and was subsequently convicted on three counts of negligent homicide.

vertently but recklessly leading people “over a cliff,” Ray might be discredited in the eyes of his followers. But think again. Reporters working on this horrific story had no trouble finding Ray advocates who continued to enthusiastically champion his vision for self-improvement (Kraft, 2009). This unwavering faith in Ray’s teachings provides a remarkable testimonial to the persuasive power of the charismatic leaders who promote self-realization programs. Nonetheless, in 2011 an Arizona jury deliberated for less than 12 hours before convicting Ray on three counts of negligent homicide (Riccardi, 2011).

We could also discuss how a number of unorthodox religious groups—commonly called *cults*—have attracted countless converts who voluntarily embrace a life of regimentation, obedience, and zealous ideology. It is difficult to get good data, but one study suggested that more than 2 million young adults are involved with cults in the United States (Robinson, Frye, & Bradley, 1997). Most of these cults flourish in obscurity, unless bizarre incidents—such as the 1997 mass suicide of the Heaven’s Gate cult near San Diego—attract public attention. It is widely believed that cults use brainwashing and mind control to seduce lonely outsiders (Richardson & Introvigne, 2001), but in reality converts are a diverse array of normal people who are swayed by ordinary—albeit sophisticated—social influence strategies (Singer, 2003; Zimbardo, 2002). It appears that people join cults because these groups appear to provide simple solutions to complex problems, a sense of purpose and belongingness, and a structured lifestyle that reduces feelings of uncertainty (Coates, 2011; Zimbardo, 1992). According to Hunter (1998), alienation, identity confusion, and weak community ties make some people particularly vulnerable to seduction by cults.

And, if you would like a mundane, everyday example of people’s search for direction, you need look no farther than your radio, where you will find that the hottest nationally syndicated personality is “Dr. Laura” Schlessinger,

who doles out advice to millions of listeners. Even though only seven or eight people get through to her during each show, an astonishing 75,000 people call each day to seek her unique brand of blunt, outspoken, judgmental advice. Dr. Laura, who is not a psychologist or psychiatrist (her doctorate is in physiology), analyzes callers’ problems in more of a moral than psychological framework. Unlike most therapists, she is confrontational, manifests little

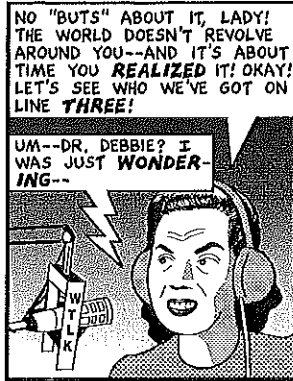
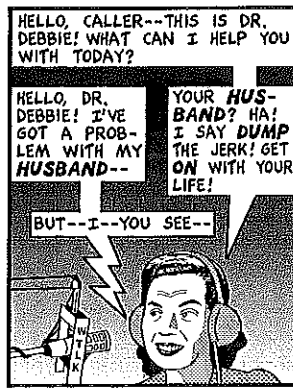


P.J. Heller/ZUMA PRESS/Newscom

There are many manifestations of our search for a sense of direction, including the astonishing popularity of “Dr. Laura.”

THIS MODERN WORLD

by TOM TOMORROW



Copyright 2000. Used by permission. tomtomorrow@ix.netcom.com

empathy for her callers, and preaches to her audience about how they ought to lead their lives (Arkowitz & Lilienfeld, 2010). In many instances she is insulting to her callers, models intolerance, and provides questionable advice. In an editorial in *Psychology Today*, Robert Epstein (2001) concluded that "no legitimate mental health professional would ever give the kind of hateful, divisive advice that Schlessinger doles out daily" (p. 5). Yet, the remarkable popularity of her highly prescriptive advice demonstrates once again that many people are eager for guidance and direction.

Learn More Online

Psychological Self-Help

Clinical psychologist and professor Clayton E. Tucker-Ladd spent over 30 years exploring how individuals can help themselves deal with personal issues and problems from a psychological perspective. Here you will find an online twelve-chapter self-help book that he wrote, grounded in up-to-date research, that complements this textbook extremely well.

Note: The URLs (addresses) for the Learn More Online websites can be found on the website for this text (<http://www.cengagebrain.com>), or you can find them using a search engine such as Google.



Although we might choose to examine any of these examples of people's search for a sense of direction, we will reserve our in-depth analysis for a manifestation of this search that is even more germane to our focus on everyday adjustment: the spectacular success of bestselling "self-help" books.

Self-Help Books

Americans spend roughly \$650 million annually on "self-help books" that offer do-it-yourself treatments for common personal problems (Arkowitz & Lilienfeld, 2006). According to a recent report by Marketdata Enterprises, if you include self-help audiotapes, CDs, DVDs, software, Internet sites, lectures, seminars, and life coaching, self-improvement appears to be a \$10 billion-a-year industry. This fascination with self-improvement is nothing new.

For decades American readers have displayed a voracious appetite for self-help books such as *I'm OK—You're OK* (Harris, 1967), *The Seven Habits of Highly Effective People* (Covey, 1989), *Ageless Body, Timeless Mind* (Chopra, 1993), *Don't Sweat the Small Stuff . . . and It's All Small Stuff* (Carlson, 1997), *The Purpose Driven Life* (Warren, 2002), *The Secret* (Byrne, 2006), *Become a Better You: Seven Keys to Improving Your Life Every Day* (Osteen, 2009), *The Power of Habit: Why We Do What We Do in Life and Business* (Duhigg, 2012), and *You're Stronger Than You Think* (Parrott, 2012).

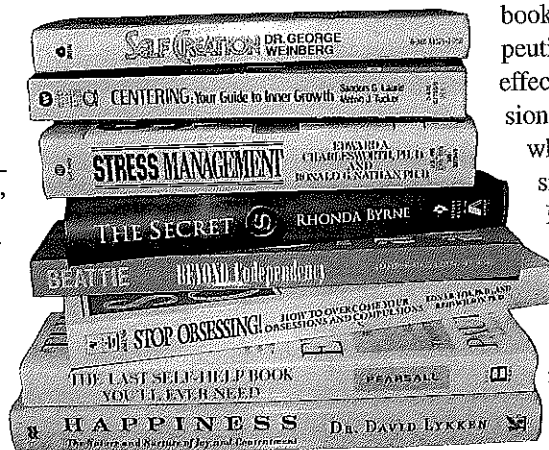
With their simple recipes for achieving happiness, the authors of these books have generally not been timid about promising to change the quality of the reader's life. Unfortunately, merely reading a book is not likely to turn your life around. If only it were that easy! If only someone could hand you a book that would solve all your problems! If the consumption of these literary narcotics were even remotely as helpful as their publishers claim, we would be a nation of serene, happy, well-adjusted people. It is clear, however, that serenity is not the dominant national mood. Quite the contrary, as already noted, in recent decades the prevalence of anxiety and depression appear to have increased. The multitude of self-help books that crowd bookstore shelves represent just one more symptom of our collective distress and our search for the elusive secret of happiness.

The Value of Self-Help Books

It is somewhat unfair to lump all self-help books together for a critique, because they vary widely in quality (Norcross et al., 2003). Surveys exploring psychotherapists' opinions of self-help books suggest that there are some excellent books that offer authentic insights and sound advice (Starker, 1992). Many therapists encourage their patients to read carefully selected self-help books (Campbell & Smith, 2003). A few books have even been tested in clinical trials with favorable results (Floyd, 2003; Gregory et al., 2004), although the studies have often had methodological weaknesses (Arkowitz & Lilienfeld, 2006). Thus, it would be foolish to dismiss all these books as shallow drivel. In fact, some of the better self-help books are highlighted in the Recommended Reading boxes that appear throughout this text. Unfortunately, however, the gems are easily lost in the mountains of rubbish. A great many self-help books offer little of real value to the reader. Generally, they suffer from four fundamental shortcomings.

First, they are dominated by "psychobabble." The term *psychobabble*, coined by R. D. Rosen (1977), seems appropriate to describe the "hip" but hopelessly vague language used in many of these books. Statements such as "It's beautiful if you're unhappy," "You've got to get in touch with yourself," "You have to be up front," "You gotta be you 'cause you're you," and "You need a real high-energy experience" are typical examples of this language. At best, such terminology is ill-defined; at worst, it is meaningless. Clarity is sacrificed in favor of a jargon that prevents, rather than enhances, effective communication.

A second problem is that self-help books tend to place more emphasis on sales than on scientific soundness. The advice offered in these books is far too rarely based on solid, scientific research (Ellis, 1993; Paul, 2001; Rosen, 1993). Instead, the ideas are frequently based on the authors' intuitive analyses, which may be highly speculative. Even when



books are based on well-researched therapeutic programs, interventions that are effective in clinical settings with professional supervision may not be effective when self-administered without professional guidance (Rosen, Glasgow, & Moore, 2003). Moreover, even when responsible authors provide scientifically valid advice and are careful not to mislead their readers, sales-hungry publishers routinely slap outrageous, irresponsible promises on the books' covers, often to the dismay of the authors (Rosen et al., 2003).

The third shortcoming is that self-help books don't usually provide explicit directions about how to change your behavior. These books tend to be smoothly written and "touchingly human" in tone. They often strike responsive chords in the reader by aptly describing a common problem that many of us experience. The reader says, "Yes, that's me!" Unfortunately, when the book focuses on how to deal with the problem, it usually provides only a vague distillation of simple common sense, which could be covered in 2 rather than 200 pages. These books often fall back on inspirational cheerleading in the absence of sound, explicit advice.

Fourth, many of these books encourage a remarkably self-centered, narcissistic approach to life (Justman, 2005). **Narcissism is a personality trait marked by an inflated sense of importance, a need for attention and admiration, a sense of entitlement, and a tendency to exploit others.** The term is based on the Greek myth of Narcissus, an attractive young man in search of love who saw himself

Learn More Online

Quackwatch

Stephen Barrett, a retired psychiatrist, has sought to alert the public to "health-related frauds, myths, fads, and fallacies" for over 30 years. This site offers no-holds-barred evaluations of Internet-based medical resources that Barrett and his board of scientific and technical advisers judge to be dubious, fraudulent, or dangerous to one's health.



Anton Gvozdkov/Shutterstock.com

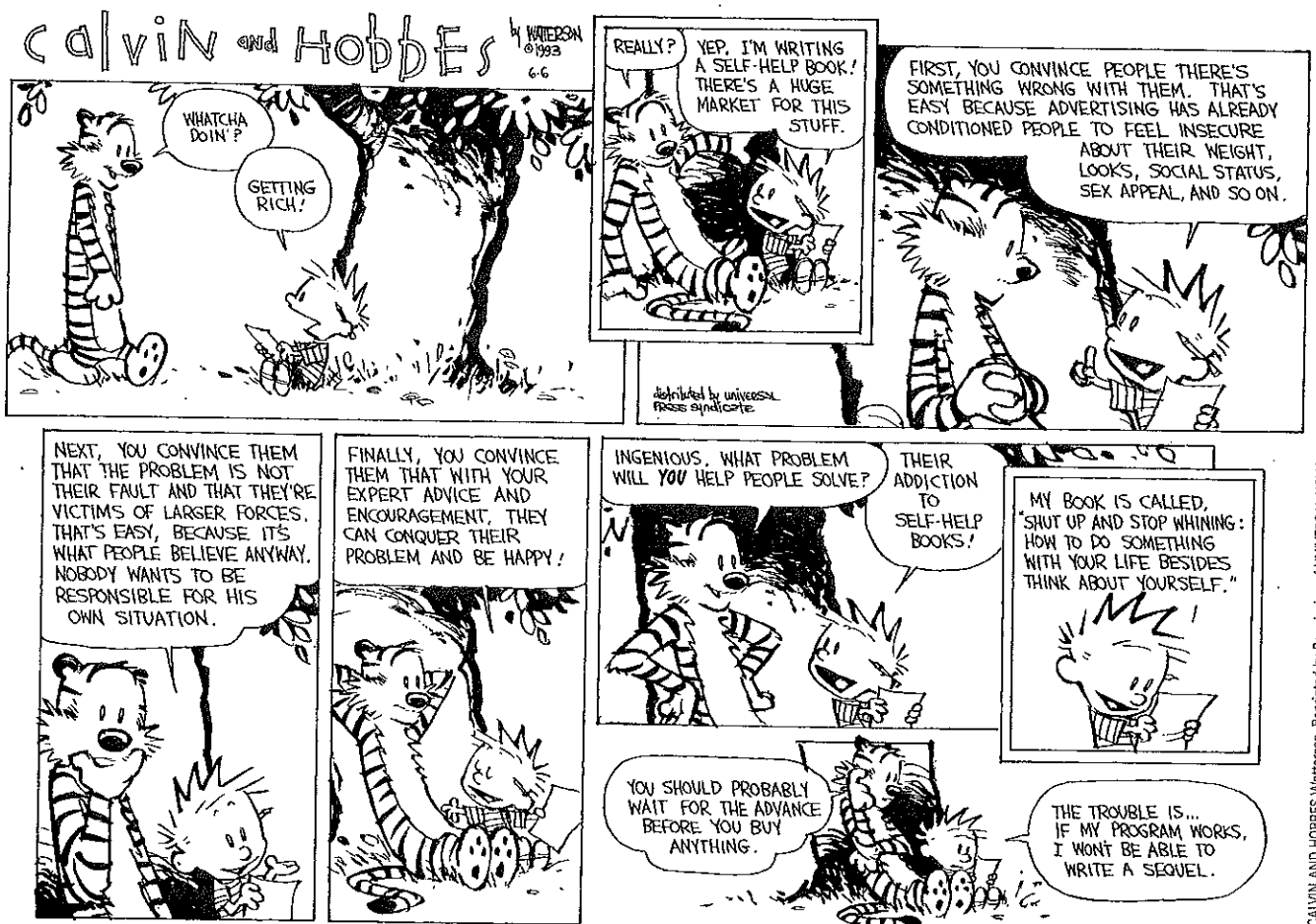
reflected in water and fell in love with his own image. Although there are plenty of exceptions, the basic message in many self-help books is "Do whatever you feel like doing, and don't worry about the consequences for other people." According to McGee (2005), this mentality began to creep into books in the 1970s, as "bald proposals that one ought to 'look out for #1' or 'win through intimidation' marked a new ruthlessness in the self-help landscape" (p. 50). This "me first" philosophy emphasizes self-admiration, an entitlement to special treatment, and an exploitive approach to interpersonal relationships. Interestingly, research suggests that narcissism levels have increased among recent generations of college students (Twenge & Campbell, 2009; see Chapter 2). It is hard to say how much popular self-help books have fueled this rise, but surely they have contributed (the most widely used measure of narcissism is included in the *Personal Explorations Workbook* in the back of this text).

What to Look for in Self-Help Books

Because self-help books vary so widely in quality, it seems a good idea to provide you with some guidelines about what to look for in seeking genuinely helpful books. The

following thoughts give you some criteria for judging books of this type:

1. Clarity in communication is essential. Advice won't do you much good if you can't understand it. Try to avoid drowning in the murky depths of psychobabble.
2. This may sound backward, but look for books that do not promise too much in the way of immediate change. The truly useful books tend to be appropriately cautious in their promises and realistic about the challenge of altering your behavior. As Arkowitz and Lilienfeld (2006, p. 79) put it, "Be wary of books that make promises that they obviously cannot keep, such as curing a phobia in five minutes or fixing a failing marriage in a week."
3. Try to check out the credentials of the author or authors. Book jackets will often exaggerate the expertise of authors, but these days a quick Internet search can often yield more objective biographical information and perhaps some perceptive reviews of the book.
4. Try to select books that mention, at least briefly, the theoretical or research basis for the program they advocate. It is understandable that you may not be interested in a detailed summary of research that supports a particular piece of advice. However, you should be interested in



CALVIN AND HOBBS Watterson. Reprinted by Permission of UNIVERSAL UCLUCK. All rights reserved.

whether the advice is based on published research, widely accepted theory, anecdotal evidence, clinical interactions with patients, or pure speculation by the author. Books that are based on more than personal anecdotes and speculation should have a list of references in the back (or at the end of each chapter).

5. Look for books that provide detailed, explicit directions about how to alter your behavior. Generally, these directions represent the crucial core of the book. If they are inadequate in detail, you have been shortchanged.

6. More often than not, books that focus on a particular kind of problem, such as overeating, loneliness, or marital difficulties, deliver more than those that promise to cure all of life's problems with a few simple ideas. Books that cover everything are usually superficial and disappointing. Books that devote a great deal of thought to a particular topic tend to be written by authors with genuine expertise on that topic. Such books are more likely to pay off for you.

The Approach of This Textbook

Clearly, in spite of our impressive technological progress, we are a people beset by a great variety of personal problems. Living in our complex, modern society is a formidable challenge. This book is about that challenge. It is about you. It is about life. Specifically, it summarizes the scientific research on human behavior that appears relevant to the challenge of living effectively in contemporary society. It draws primarily, but not exclusively, from the science we call psychology.

This text deals with the same kinds of problems addressed by self-help books, self-realization programs, and popular media "therapists": anxiety, stress, interpersonal relationships, frustration, loneliness, depression, self-control. However, it makes no boldly seductive promises about solving your personal problems, turning your life around, or helping you achieve tranquility. Such promises simply aren't realistic. Psychologists have long recognized that changing a person's behavior is a difficult challenge, fraught with frustration and failure (Seligman, 1994). Troubled individuals sometimes spend years in therapy without resolving their problems.

This reality does not mean that you should be pessimistic about your potential for personal growth. You most certainly can change your behavior. Moreover, you can often change it on your own without consulting a professional psychologist. We would not be writing this text if we did not believe it could be beneficial to our readers. But it is important that you have realistic expectations. Reading this book will not be a revelatory experience. No mysterious secrets are about to be unveiled. All this book can do is give you some useful information and point you in some potentially beneficial directions. The rest is up to you.

In view of our criticisms of self-realization programs and self-help books, it seems essential that we explicitly lay out the philosophy that underlies the writing of this text. The following statements summarize the assumptions and goals of this book:

1. *This text is based on the premise that accurate knowledge about the principles of psychology can be of value to you in everyday life.* It has been said that knowledge is power. Greater awareness of why people behave as they do should help you in interacting with others as well as in trying to understand yourself.

2. *This text attempts to foster a critical attitude about psychological issues and to enhance your critical thinking skills.* Information is important, but people also need to develop effective strategies for evaluating information. Critical thinking involves subjecting ideas to systematic, skeptical scrutiny. Critical thinkers ask tough questions, such as: What exactly is being asserted? What assumptions underlie this assertion? What evidence or reasoning supports this assertion? Is there contradictory evidence? Are there alternative explanations? Critical thinkers try to avoid emotional reasoning and oversimplification. They also recognize that sometimes they have to tolerate uncertainty. We have already attempted to illustrate the importance of a critical attitude in our evaluation of self-help books, and we'll continue to model critical thinking strategies throughout the text.

3. *This text should open doors.* The coverage in this book is broad; we tackle many topics. Therefore, in some places it may lack the depth or detail that you would like. However, you should think of it as a resource that can introduce you to other books or techniques or therapies, which you can then pursue on your own.

4. *This text assumes that the key to effective adjustment is to take charge of your own life.* If you are dissatisfied with some aspect of your life, it does no good to sit around and mope about it. You have to take an active role in attempting to improve the quality of your life. Doing so may involve learning a new skill or pursuing a particular kind of help. In any case, it is generally best to meet problems head-on rather than trying to avoid them.

Learn More Online



Foundation for Critical Thinking

How can students best develop skills that go beyond merely acquiring information to actively weighing and judging information? The many resources of the Foundation for Critical Thinking at Sonoma State University are directed primarily toward teachers at every level to help them develop their students' critical thinking abilities.

THE PSYCHOLOGY OF ADJUSTMENT

LEARNING OBJECTIVES

- Describe the two key facets of psychology.
- Explain the concept of adjustment.

Now that we have spelled out our approach in writing this text, it is time to turn to the task of introducing you to some basic concepts. In this section, we'll discuss the nature of psychology and the concept of adjustment.

What Is Psychology?

Psychology is the science that studies behavior and the physiological and mental processes that underlie it, and it is the profession that applies the accumulated knowledge of this science to practical problems. Psychology leads a complex dual existence as both a *science* and a *profession*. Let's examine the science first. Psychology is an area of scientific study, much like biology or physics. Whereas biology focuses on life processes and physics focuses on matter and energy, psychology focuses on *behavior and related mental and physiological processes*.

Behavior is any overt (observable) response or activity by an organism. Psychology does *not* confine itself to the study of human behavior. Many psychologists believe that the principles of behavior are much the same for all animals, including humans. As a result, these psychologists often prefer to study animals—mainly because they can exert more control over the factors influencing the animals' behavior.

Psychology is also interested in the mental processes—the thoughts, feelings, and wishes—that accompany behavior. Mental processes are more difficult to study than behavior because they are private and not directly observable. However, they exert critical influence over human behavior, so psychologists have strived to improve their ability to “look inside the mind.”

Finally, psychology includes the study of the physiological processes that underlie behavior. Thus, some psychologists try to figure out how bodily processes such as neural impulses, hormonal secretions, and genetic coding regulate behavior.

Practically speaking, all this means that psychologists study a great variety of phenomena. Psychologists are interested in maze running in rats, salivation in dogs, and brain functioning in cats, as well as visual perception in humans, play in children, and social interaction in adults.

As you probably know, psychology is not all pure science. It has a highly practical side, represented by the many psychologists who provide a variety of professional services to the public. Although the profession of psychology is quite prominent today, this aspect of psychology was actually slow to develop. Until the 1950s psychologists were found almost exclusively in the halls of aca-

demia, teaching and doing research. However, the demands of World War II in the 1940s stimulated rapid growth in psychology's first professional specialty: clinical psychology. **Clinical psychology is the branch of psychology concerned with the diagnosis and treatment of psychological problems and disorders.** During World War II, a multitude of academic psychologists were pressed into service as clinicians to screen military recruits and treat soldiers suffering from trauma. Many found their clinical work interesting and returned from the war to set up training programs to meet the continued high demand for clinical services. Soon, about half of the new Ph.D.'s in psychology were specializing in clinical work. Psychology had come of age as a profession.

What Is Adjustment?

We have used the term *adjustment* several times without clarifying its exact meaning. The concept of adjustment was originally borrowed from biology. It was modeled after the biological term *adaptation*, which refers to efforts by a species to adjust to changes in its environment. Just as a field mouse has to adapt to an unusually brutal winter, a person has to adjust to changes in circumstances such as a new job, a financial setback, or the loss of a loved one. Thus, **adjustment refers to the psychological processes through which people manage or cope with the demands and challenges of everyday life.**

The demands of daily life are diverse, so in studying the process of adjustment we will encounter a broad variety of topics. In our early chapters we discuss general issues, such as how personality affects people's patterns of adjustment, how individuals are affected by stress, and how they use coping strategies to deal with stress. From there we move on to chapters that examine adjustment in an interpersonal context. We discuss topics such as prejudice, persuasion, social conflict, behavior in groups, friendship, love, marriage, divorce, gender roles, career development, and sexuality. Finally, toward the end of the book we discuss how the process of adjustment influences a person's psychological health, look at how psychological disorders can be treated, and delve into the newly developing domain of positive psychology. As you can see, the study of adjustment enters into nearly every corner of people's lives, and we'll be discussing a diverse array of issues. Before we begin considering these topics in earnest, however, we need to take a closer look at psychology's approach to investigating behavior: the scientific method.

THE SCIENTIFIC APPROACH TO BEHAVIOR

LEARNING OBJECTIVES

- Explain the nature of empiricism and the advantages of the scientific approach to behavior.
- Describe the experimental method, distinguishing between independent and dependent variables and between experimental and control groups.
- Distinguish between positive and negative correlation, and explain what the size of a correlation coefficient means.
- Describe three correlational research methods.
- Compare the advantages and disadvantages of experimental versus correlational research.

We all expend a great deal of effort in trying to understand our own behavior as well as the behavior of others. We wonder about any number of behavioral questions: Why am I so anxious when I interact with new people? Why is Sam always trying to be the center of attention at the office? Why does Juanita cheat on her wonderful husband? Are extraverts happier than introverts? Is depression more common during the Christmas holidays? Given that psychologists' principal goal is to explain behavior, how are their efforts different from everyone else's? The key difference is that psychology is a *science*, committed to *empiricism*.

The Commitment to Empiricism

Empiricism is the premise that knowledge should be acquired through observation. When we say that scientific psychology is empirical, we mean that its conclusions are based on systematic observation rather than on reasoning, speculation, traditional beliefs, or common sense. Scientists are not content with having ideas that sound plausible; they must conduct research to *test* their ideas. Whereas our everyday speculations are informal, unsystematic, and highly subjective, scientists' investigations are formal, systematic, and objective.

In these investigations, scientists formulate testable hypotheses, gather data (make observations) relevant to their hypotheses, use statistics to analyze these data, and report their results to the public and other scientists, typically by publishing their findings in a technical journal. The process of publishing scientific studies allows other experts to evaluate and critique new research findings.

Advantages of the Scientific Approach

Science is certainly not the only method that can be used to draw conclusions about behavior. We can also turn to logic, casual observation, and good old-fashioned common sense. Because the scientific method often requires painstaking effort, it seems reasonable to ask: What exactly are the advantages of the empirical approach?

The scientific approach offers two major advantages. The first is its clarity and precision. Commonsense notions about behavior tend to be vague and ambiguous. Consider the old truism "Spare the rod and spoil the child." What does this generalization about childrearing amount to?

How severely should children be punished if parents are not to "spare the rod"? How do parents assess whether a child qualifies as "spoiled"? Such statements can have different meanings to different people. When people disagree about this assertion, it may be because they are talking about entirely different things. In contrast, the empirical approach requires that scientists specify *exactly* what they are talking about when they formulate hypotheses (the ideas they want to test). This clarity and precision enhance communication about important ideas.

The second advantage offered by the scientific approach is its relative intolerance of error. Scientists subject their ideas to empirical tests. They also scrutinize one another's findings with a critical eye. They demand objective data and thorough documentation before they accept ideas. When the findings of two studies conflict, they try to figure out why the studies reached different conclusions, usually by conducting additional research. In contrast, common sense and casual observation often tolerate contradictory generalizations, such as "Opposites attract" and "Birds of a feather flock together." Furthermore, commonsense analyses involve little effort to verify ideas or detect errors, so that many myths about behavior come to be widely believed.

All this is not to say that science has a copyright on truth. However, the scientific approach does tend to yield more accurate and dependable information than casual analyses and armchair speculation. Knowledge of empirical data can thus provide a useful benchmark against which to judge claims and information from other kinds of sources.

Now that we have an overview of how the scientific enterprise works, we can look at some of the specific research methods that psychologists depend on most. The two main types of research methods in psychology are *experimental* and *correlational*. We discuss them separately because an important distinction exists between them.

Experimental Research: Looking for Causes

Does misery love company? This question intrigued social psychologist Stanley Schachter. When people feel anxious, do they want to be left alone, or do they prefer to have others around? Schachter hypothesized that increases in

anxiety would cause increases in the desire to be with others, which psychologists call the *need for affiliation*. To test this hypothesis, Schachter (1959) designed a clever experiment. The *experiment* is a research method in which the investigator manipulates one (independent) variable under carefully controlled conditions and observes whether any changes occur in a second (dependent) variable as a result. Psychologists depend on this method more than any other.

Independent and Dependent Variables

An experiment is designed to find out whether changes in one variable (let's call it x) cause changes in another variable (let's call it y). To put it more concisely, we want to know how x affects y . In this formulation, we refer to x as the independent variable, and we call y the dependent variable. **An independent variable is a condition or event that an experimenter varies in order to see its impact on another variable.** The independent variable is the variable that the experimenter controls or manipulates. It is hypothesized to have some effect on the dependent variable. The experiment is conducted to verify this effect. **The dependent variable is the variable that is thought to be affected by the manipulations of the independent variable.** In psychology studies, the dependent variable is usually a measurement of some aspect of the subjects' behavior.

In Schachter's experiment, *the independent variable was the participants' anxiety level*, which he manipulated in the following way. Subjects assembled in his laboratory were told by a Dr. Zilstein that they would be participating in a study on the physiological effects of electric shock and that they would receive a series of shocks. Half of the participants were warned that the shocks would be very painful. They made up the *high-anxiety* group. The other half of the participants, assigned to the *low-anxiety* group, were told that the shocks would be mild and painless. These procedures were simply intended to evoke different levels of anxiety. In reality, no one was actually shocked at any time. Instead, the experimenter indicated that there would be a delay while he prepared the shock apparatus for use. The participants were asked whether they would prefer to wait alone or in the company of others. *This measure of the subjects' desire to affiliate with others was the dependent variable.*

Experimental and Control Groups

To conduct an experiment, an investigator typically assembles two groups of participants who are treated differently in regard to the independent variable. We call these groups the experimental and control groups. **The experimental group consists of the subjects who receive some special treatment in regard to the independent variable. The control group consists of similar subjects who do not receive the special treatment given to the experimental group.**

Let's return to the Schachter study to illustrate. In this experiment, the participants in the high-anxiety condition were the experimental group. They received a special treatment designed to create an unusually high level of anxiety. The participants in the low-anxiety condition were the control group.

It is crucial that the experimental and control groups be similar except for the different treatment they receive in regard to the independent variable. This stipulation brings us to the logic that underlies the experimental method. If the two groups are alike in all respects *except for the variation created by the manipulation of the independent variable*, then any differences between the two groups on the dependent variable *must be due to this manipulation of the independent variable*. In this way researchers isolate the effect of the independent variable on the dependent variable. In his experiment, Schachter isolated the impact of anxiety on need for affiliation. What did he find? As predicted, he found that increased anxiety led to increased affiliation. The percentage of people who wanted to wait with others was nearly twice as high in the high-anxiety group as in the low-anxiety group.

The logic of the experimental method rests heavily on the assumption that the experimental and control groups are alike in all important matters except for their different treatment with regard to the independent variable. Any other differences between the two groups cloud the situation and make it difficult to draw solid conclusions about the relationship between the independent variable and the dependent variable. To summarize our discussion of the experimental method, **Figure 1.1** provides an overview of the various elements in an experiment, using Schachter's study as an example.

Advantages and Disadvantages

The experiment is a powerful research method. Its principal advantage is that it allows scientists to draw conclusions about cause-and-effect relationships between variables. Researchers can draw these conclusions about causation because the precise control available in the experiment permits them to isolate the relationship between the independent variable and the dependent variable. No other research method can duplicate this advantage.

For all its power, however, the experimental method has its limitations. One disadvantage is that researchers are often interested in the effects of variables that cannot be manipulated (as independent variables) because of ethical concerns or practical realities. For example, you might want to know whether being brought up in an urban area as opposed to a rural area affects people's values. A true experiment would require you to assign similar families to live in urban and rural areas, which obviously is impossible to do. To explore this question, you would have to use correlational research methods, which we turn to next.

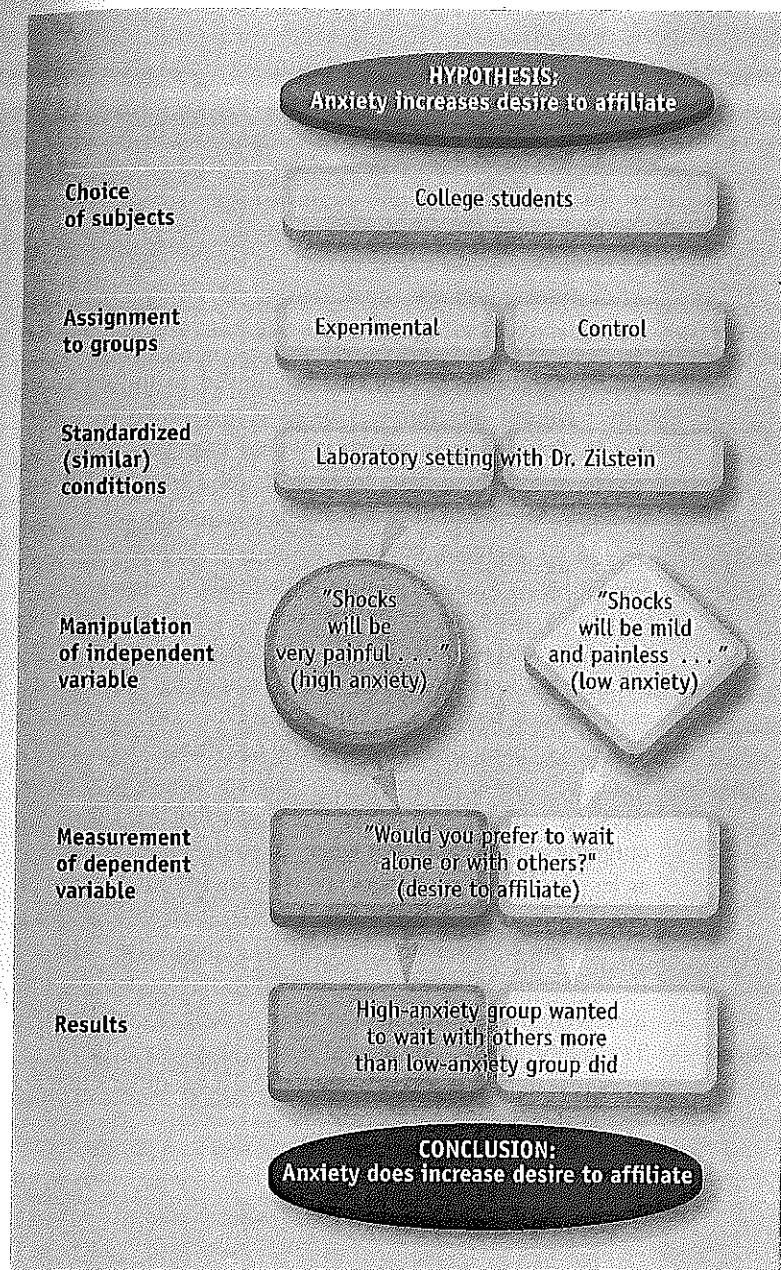


Figure 1.1
The basic elements of an experiment. This diagram provides an overview of the key features of the experimental method, as illustrated by Schachter's study of anxiety and affiliation. The logic of the experiment rests on treating the experimental and control groups alike except for the manipulation of the independent variable.

Learn More Online

Research Methods Tutorials

Bill Trochim's classes in research and program design at Cornell University have assembled tutorial guides for undergraduate and graduate students on more than fifty topics at this subpage (titled Trochim Presentations) of the Web Center for Social Research Methods. Students new to research design may find these tutorials particularly helpful.



Correlational Research: Looking for Links

As we just noted, in some cases psychologists cannot exert experimental control over the variables they want to study. In such situations, all a researcher can do is make systematic observations to see whether a link or association exists between the variables of interest. Such an association is called a correlation. A **correlation exists when two variables are related to each other**. The definitive aspect of correlational studies is that the researchers cannot control the variables under study.

Measuring Correlation

The results of correlational research are often summarized with a statistic called the *correlation coefficient*. We'll be referring to this widely used statistic frequently as we discuss studies throughout the remainder of this text. A **correlation coefficient is a numerical index of the degree of relationship that exists between two variables**. A correlation coefficient indicates (1) how strongly related two variables are and (2) the direction (positive or negative) of the relationship.

Two kinds of relationships can be described by a correlation. A *positive* correlation indicates that two variables co-vary in the same direction. This means that high scores on variable *x* are associated with high scores on variable *y* and that low scores on variable *x* are associated with low scores on variable *y*. For example, there is a positive correlation between high school grade point average (GPA) and subsequent college GPA. That is, people who do well in high school tend to do well in college, and those who perform poorly in high school tend to perform poorly in college (see **Figure 1.2** on the next page).

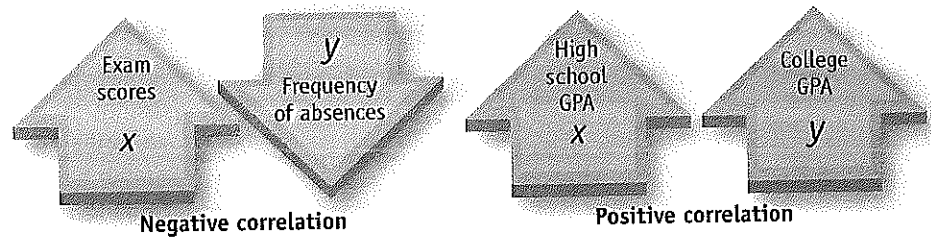
In contrast, a *negative* correlation indicates that two variables co-vary in the opposite direction. This means that people who score high on variable *x* tend to score low on variable *y*, whereas those who score low on *x* tend to score high on *y*.

For example, in most college courses, there is a negative correlation between how often a student is absent and how well the student performs on exams. Students who have a high number of absences tend to earn low exam scores, while students who have a low number of absences tend to get higher exam scores (see **Figure 1.2**).

While the positive or negative sign indicates whether an association is direct or inverse, the *size* of the coefficient indicates the *strength* of the association between two variables. A correlation coefficient can vary between 0 and

Figure 1.2

Positive and negative correlations. Variables are positively correlated if they tend to increase and decrease together and are negatively correlated if one variable tends to increase when the other decreases. Hence, the terms *positive correlation* and *negative correlation* refer to the *direction* of the relationship between two variables.



+1.00 (if positive) or between 0 and -1.00 (if negative). A coefficient near zero tells us there is no relationship between the variables. The closer the correlation to either -1.00 or $+1.00$, the stronger the relationship. Thus, a correlation of $+0.90$ represents a stronger tendency for variables to be associated than a correlation of $+0.40$ does (see Figure 1.3). Likewise, a correlation of -0.75 represents a stronger relationship than a correlation of -0.45 . Keep in mind that the *strength* of a correlation depends only on the size of the coefficient. The positive or negative sign simply shows whether the correlation is direct or inverse. Therefore, a correlation of -0.60 reflects a stronger relationship than a correlation of $+0.30$.

Correlational research methods comprise a number of approaches, including naturalistic observation, case studies, and surveys. Let's examine each of these to see how researchers use them to detect associations between variables.

Naturalistic Observation

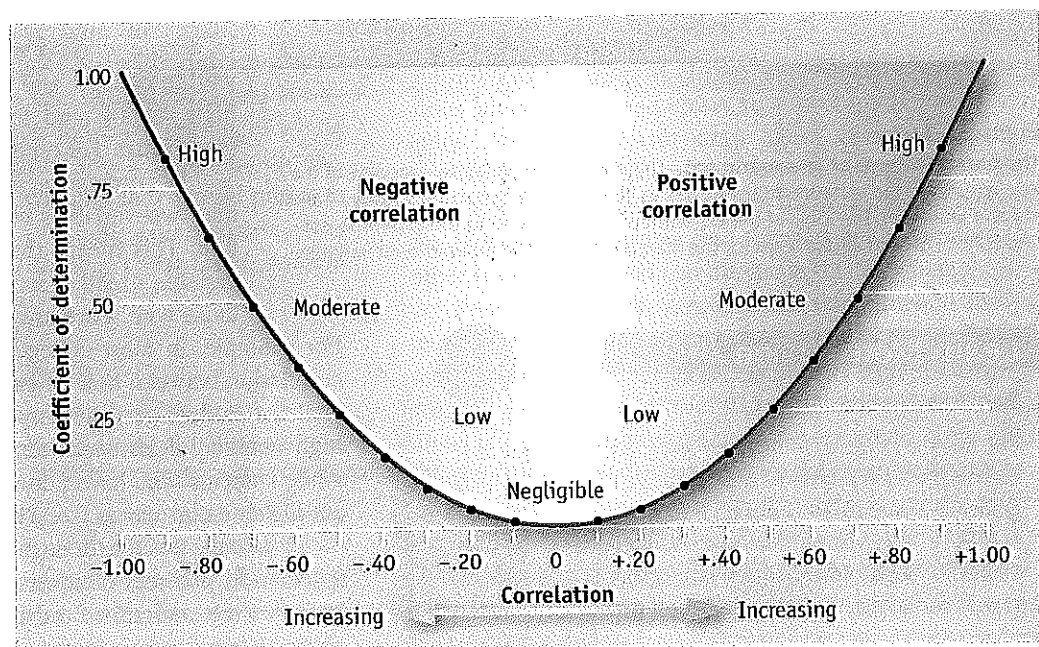
In *naturalistic observation* a researcher engages in careful observation of behavior without intervening directly with the subjects. This type of research is called

naturalistic because behavior is allowed to unfold naturally (without interference) in its natural environment—that is, the setting in which it would normally occur. Of course, researchers have to make careful plans to ensure systematic, consistent observations (Angrosino, 2007).

As an example, consider a study by Ramirez-Esparza and colleagues (2009) that examined ethnic differences in sociability using an innovative device called an electronically activated recorder (EAR). The EAR is an unobtrusive, portable audio recorder carried by participants that periodically records their conversations and other ambient sounds as they go about their normal daily activities (Mehl, 2007). Using this clever device, the researchers investigated an interesting paradox—stereotypes suggest that Mexicans are outgoing and sociable, but when asked they rate themselves as less sociable than Americans. The study found, as usual, that Mexican participants rated themselves as less extraverted than American participants rated themselves. But the EAR data on Mexicans' actual daily behavior showed that they were *more* sociable than their American counterparts. The major strength of naturalistic observation is that it allows researchers to study behavior under conditions that are less artificial than in experiments.

Figure 1.3

Interpreting correlation coefficients. The magnitude of a correlation coefficient indicates the strength of the relationship between two variables. The closer a correlation is to either $+1.00$ or -1.00 , the stronger the relationship between the variables. The square of a correlation, which is called the *coefficient of determination*, is an index of a correlation's strength and predictive power. This graph shows how the coefficient of determination and predictive power goes up as the magnitude of a correlation increases.



Case Studies

A **case study** is an in-depth investigation of an individual subject. Psychologists typically assemble case studies in clinical settings where an effort is being made to diagnose and treat some psychological problem. To achieve an understanding of an individual, a clinician may use a variety of procedures, including interviewing the person, interviewing others who know the individual, direct observation, examination of records, and psychological testing. When clinicians assemble a case study for diagnostic purposes, they generally are *not* conducting empirical research. Case study *research* typically involves investigators analyzing a collection or consecutive series of case studies to look for patterns that permit general conclusions.

For example, one study (Arcelus et al., 2009) evaluated the efficacy of a revised version of a treatment called interpersonal psychotherapy (IPT) for people suffering from bulimia (an eating disorder marked by out-of-control overeating followed by self-induced vomiting, fasting, and excessive exercise). Over a two-year period, 59 bulimic patients were treated with IPT at an eating disorders clinic in Great Britain. Case histories were compiled for all the patients, who also took a battery of tests that assessed their eating pathology and other aspects of their psychological functioning. Careful assessments were made of the patients at the midpoint, and at the end of the sixteen-session course of IPT treatment, and three months after treatment was concluded. The results demonstrated that interpersonal therapy can be an effective treatment for bulimic disorders. Case studies are particularly well suited for investigating certain phenomena, especially the roots of psychological disorders and the efficacy of selected therapeutic practices (Fishman, 2007).

Surveys

Surveys are structured questionnaires designed to solicit information about specific aspects of participants' behavior. They are sometimes used to measure dependent variables in experiments, but they are mainly used in correlational research. Surveys are commonly used to gather data on people's attitudes and on aspects of behavior that are difficult to observe directly (marital interactions, for instance). As an example, consider a study that explored the health ramifications of sedentary behavior, in particular the amount of time that people devote to TV and other screen-based entertainment. Stamatakis and colleagues (2009) conducted household interviews with a representative sample of the adult population of Scotland. Almost 8000 participants were interviewed about how many hours per day they devote to television or other screen-based entertainment (including video games and material on computers). The participants also responded to questionnaires about their physical activity, general health, and cardiovascular health, as well as demographic characteris-

tics (income, education, and other indicators of social class). Finally, subjects' height and weight were measured to permit the calculation of their body mass index (BMI), which is a widely used indicator of obesity.

What did the survey data reveal? The data showed a clear association between the amount of time allocated to screen-based entertainment and impaired health. The more people watched TV, the more likely they were to be obese, or to report doctor-diagnosed diabetes or cardiovascular disease, and the less likely they were to report good general health (see Figure 1.4). The data also uncovered a rather strong link between social class and time devoted to screen-based entertainment: The people from lower socioeconomic strata spent considerably more time in front of TVs and other screens. The study results underscored the health ramifications of sedentary behavior and demonstrated that lower social class is a key risk factor for elevated sedentary behavior.

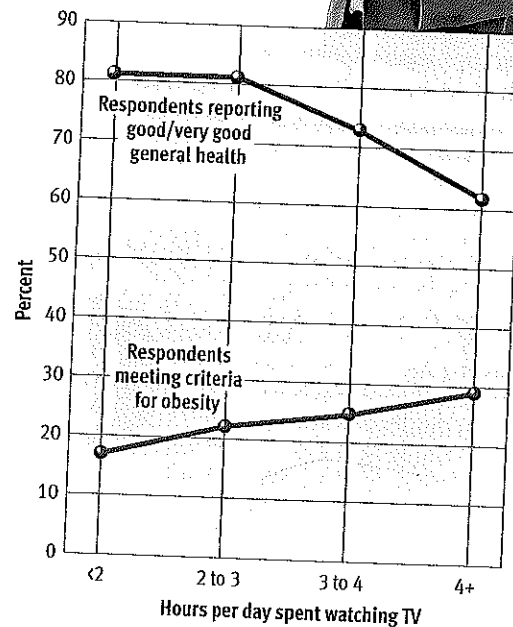


Figure 1.4

TV viewing in relation to health indicators. In the survey by Stamatakis and colleagues (2009), participants provided information about their daily TV viewing habits, answered questions about their physical health, and had their height and weight measured to permit calculation of their body mass index (BMI), which is a standard index of obesity. The blue data line shows the percentage of people who reported being in good or very good general health in relation to TV viewing time. The red data line plots the percentage of participants who met the criteria of obesity in relation to TV watching. Clearly, as TV time increases, general health tends to decline and obesity tends to increase. (Based on Stamatakis et al., 2009)

Learn More Online

American Psychological Association (APA)

As the largest professional organization of psychologists, the APA frequently publicizes research findings related to many of the topics discussed in this textbook. A small sampling of the topics covered at this site would include aging, anxiety, eating disorders, parenting, sexuality, shyness, stress, suicide, therapy, and workplace issues.



Advantages and Disadvantages

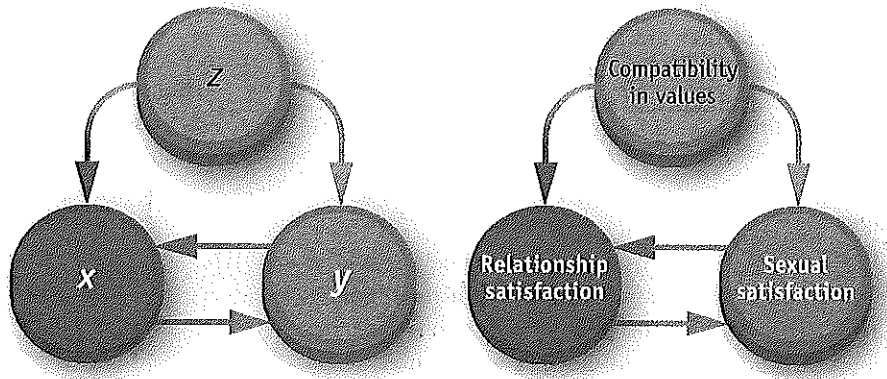
Correlational research methods give psychologists a way to explore questions that they could not examine with experimental procedures. Consider, for instance, the study on whether the amount of time people spend watching TV relates to their health. Obviously, investigators cannot assign subjects to watch a certain number of hours of TV per day for a decade or two to see if this manipulation affects their health. But the correlational methods used by Stamatakis and colleagues (2009) facilitated the collection of enlightening data on the link between sedentary behavior and health. Thus, *correlational research broadens the scope of phenomena that psychologists can study.*

Unfortunately, correlational methods have one major disadvantage. The investigator does not have the opportunity to control events in a way to isolate cause and effect. *Consequently, correlational research cannot demonstrate conclusively that two variables are causally related.* The crux of the problem is that correlation is no assurance of causation.

When we find that variables x and y are correlated, we can safely conclude only that x and y are related. We do not know *how* x and y are related. We do not know whether x causes y , whether y causes x , or whether both are caused by a third variable. For example, survey studies show a positive correlation between relationship satisfaction and sexual satisfaction (Schwartz & Young, 2009). Although it's clear that good sex and a healthy intimate relationship go hand in hand, it's hard to tell what's causing what. We don't know whether healthy relationships promote good sex or whether good sex promotes healthy relationships. Moreover, we can't rule out the possibility that both are caused by a third variable. Perhaps sexual satisfaction and relationship satisfaction are both caused by compatibility in values. The plausible causal relationships in this case are diagrammed for you in Figure 1.5, which illustrates the "third-variable problem" in interpreting correlations. This problem occurs often in correlational research. Indeed, it will surface in the next section, where we review the empirical research on the determinants of happiness.

Figure 1.5

Possible causal relations between correlated variables. When two variables are correlated, there are several possible explanations. It could be that x causes y , that y causes x , or that a third variable, z , causes changes in both x and y . As the correlation between relationship satisfaction and sexual satisfaction illustrates, the correlation itself does not provide the answer. This conundrum is sometimes referred to as the "third-variable problem."



THE ROOTS OF HAPPINESS: AN EMPIRICAL ANALYSIS

LEARNING OBJECTIVES

- Identify the various factors that are surprisingly unrelated to happiness.
- Describe the factors that are somewhat or very important to happiness.
- Summarize conclusions about the determinants of happiness.

What exactly makes a person happy? This question has been the subject of much speculation. Commonsense hypotheses about the roots of happiness abound. For exam-

ple, you have no doubt heard that money cannot buy happiness. But do you believe it? A television commercial says, "If you've got your health, you've got just about

everything.” Is health indeed the key? What if you’re healthy but poor, unemployed, and lonely? We often hear about the joys of parenthood, the joys of youth, and the joys of the simple, rural life. Are these the factors that promote happiness?

In recent years, social scientists have begun putting these and other hypotheses to empirical test. Quite a number of survey studies have been conducted to explore the determinants of *subjective well-being—individuals’ personal assessments of their overall happiness or life satisfaction*. The findings of these studies are quite interesting. We review this research because it is central to the topic of adjustment and because it illustrates the value of collecting data and putting ideas to an empirical test. As you will see, many commonsense notions about happiness appear to be inaccurate.

The first of these ideas is the apparently widespread assumption that most people are relatively unhappy. Writers, social scientists, and the general public seem to believe that people around the world are predominantly dissatisfied, yet empirical surveys consistently find that the vast majority of respondents—even those who are poor or disabled—characterize themselves as fairly happy (Diener & Diener, 1996). When people are asked to rate their happiness, only a small minority place themselves below the neutral point on the various scales used (see Figure 1.6). When the average subjective well-being of entire nations is computed, based on almost 1000 surveys, the means

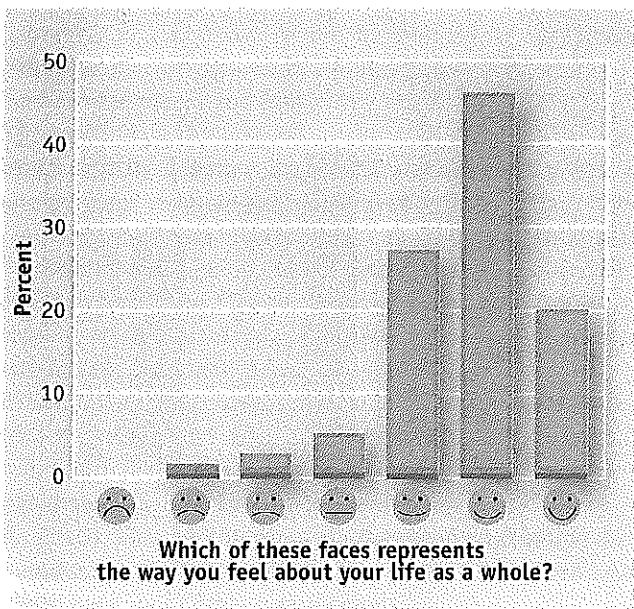


Figure 1.6
Measuring happiness with a nonverbal scale. Researchers have used a variety of methods to estimate the distribution of happiness. For example, in one study in the United States, respondents were asked to examine the seven facial expressions shown and to select the one that “comes closest to expressing how you feel about your life as a whole.” As you can see, the vast majority of participants chose happy faces. (Data adapted from Myers, 1992)

cluster toward the positive end of the scale, as shown in Figure 1.7 (Tov & Diener, 2007). Moreover, these national happiness scores generally have been on the rise since the 1980s (Inglehart et al., 2008). That’s not to say that everyone is equally happy. Researchers have found substantial and thought-provoking disparities among people in subjective well-being, which we will analyze momentarily. But the overall picture seems rosier than anticipated.

What Isn’t Very Important?

Let us begin our discussion of individual differences in happiness by highlighting those things that turn out to be relatively unimportant determinants of subjective well-being. Quite a number of factors that one might expect to be influential appear to bear little or no relationship to general happiness.

Money. Most people think that if they had more money, they would be happier. There *is* a positive correlation between income and feelings of happiness, but the association is surprisingly weak (Diener & Seligman, 2004). Within specific nations, the correlation between income and happiness tends to fall somewhere between .12 and .20. Obviously, being poor can contribute to unhappiness. Yet it seems once people ascend above a certain level of income, additional wealth does not foster greater happiness. One recent study in the United States estimated that once people exceed an income of around \$75,000, little relation is seen between wealth and subjective well-being (Kahneman & Deaton, 2010).

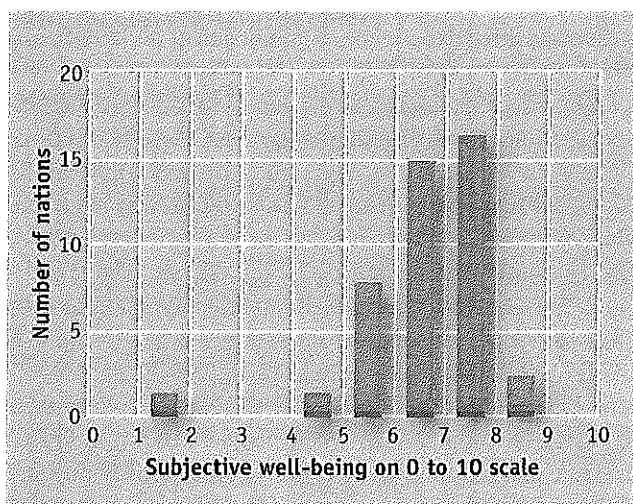


Figure 1.7
The subjective well-being of nations. Veenhoven (1993) combined the results of almost 1000 surveys to calculate the average subjective well-being reported by representative samples from forty-three nations. The mean happiness scores clearly pile up at the positive end of the distribution, with only two scores falling below the neutral point of 5. (Data adapted from Diener and Diener, 1996)

Why isn't money a better predictor of happiness? One reason is that a disconnect seems to exist between actual income and how people feel about their financial situation. Recent research (Johnson & Krueger, 2006) suggests that the correlation between actual wealth and people's subjective perceptions of whether they have enough money to meet their needs is surprisingly modest (around .30).

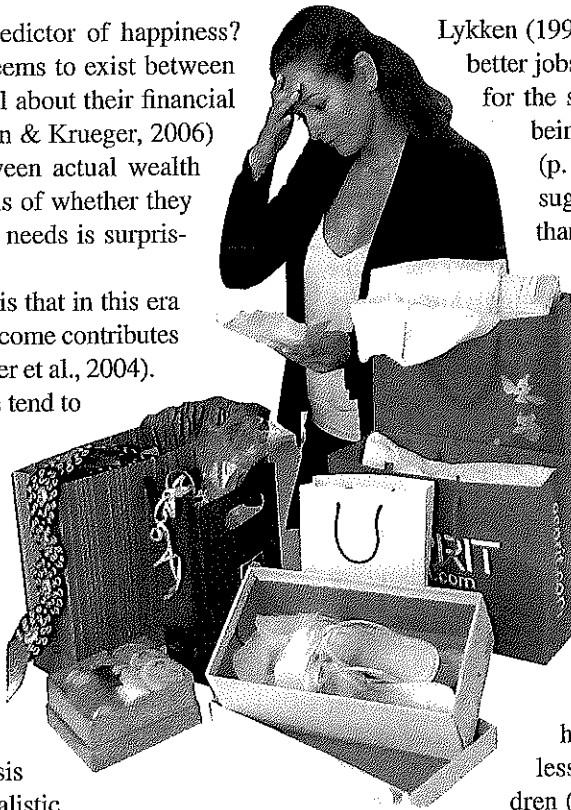
Another problem with money is that in this era of voracious consumption, rising income contributes to escalating material desires (Kasser et al., 2004). People who have lots of nice things tend to want even more. When they cannot afford more, their frustration is likely to undermine their well-being (Norris & Larsen, 2011; Solberg et al., 2002). Thus, complaints about not having enough money are routine even among people who earn hefty six-figure incomes. Interestingly, there is some evidence that people who place an especially strong emphasis on the pursuit of wealth and materialistic goals tend to be somewhat less happy than others (Van Boven, 2005). Perhaps they are so focused on financial success that they derive less satisfaction from other aspects of their lives (Nickerson et al., 2003). Consistent with this view, one study (Kahneman et al., 2006) found that higher income was associated with working longer hours and allocating fewer hours to leisure pursuits (see Figure 1.8). The results of another recent study suggested that wealthy people become jaded in a way that undermines their ability to savor positive experiences (Quoidbach et al., 2010).

Age. Age has generally been found to be unrelated to global estimates of happiness (Lykken, 1999; Myers & Diener, 1997). For example, a study of over 7000 adults concluded that levels of happiness did not vary with age (Cooper et al., 2011). That said, some recent studies have found modest-sized links between age and subjective well-being. For instance, a recent Gallup telephone poll of over 340,000 people uncovered a U-shaped relationship between age and happiness (Stone et al., 2010). That is, reports of happiness were relatively high for people in their 20s and 30s, dipped a bit when people were in their 40s and 50s, and climbed steadily for people in their 60s and 70s. Thus, conclusions about the relationship between age and happiness may require some revision, although more research is needed.

Gender. Women are treated for depressive disorders about twice as often as men (Nolen-Hoeksema, 2002), so one might expect that women are less happy on the average. And

Lykken (1999) notes that "men still tend to have better jobs than women do, and get higher pay for the same jobs . . . but they report well-being levels as high as those of men" (p. 181). Thus, surprisingly, research suggests that gender accounts for less than 1% of the variation in people's subjective well-being (Myers, 1992).

Parenthood. Children can be a tremendous source of joy and fulfillment, but they can also be a tremendous source of headaches and hassles. Compared to childless couples, parents worry more and experience more marital problems. Apparently, the good and bad aspects of parenthood balance each other out, because the evidence indicates that people who have children are neither more nor less happy than people without children (Argyle, 2001).



Stock/Photo/Alamy

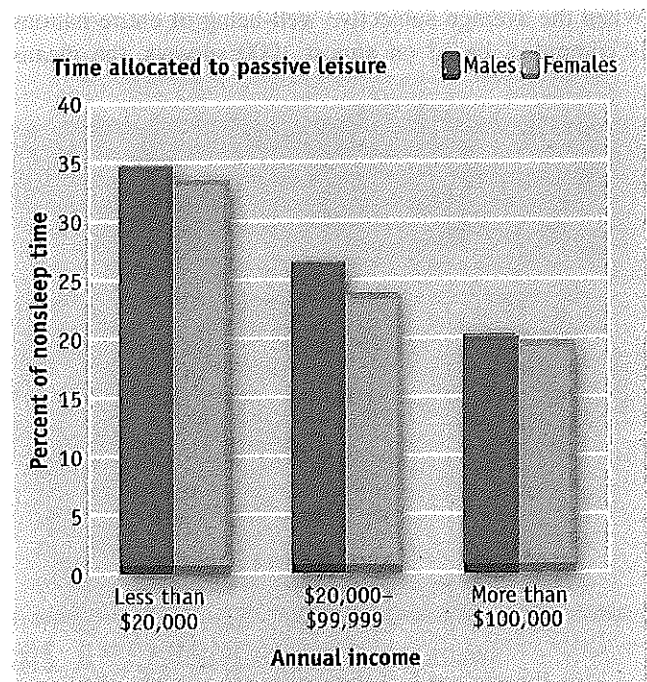


Figure 1.8

Income and leisure. In an influential study of happiness, Nobel laureate Daniel Kahneman and his colleagues (2006) attempted to shed light on why the association between income and subjective well-being is so weak. One of their key findings was that as income goes up, the time devoted to work increases, and hence, the time left for leisure declines. This graph shows the percentage of nonsleep time devoted to passive leisure activities for three levels of income.

Intelligence. Intelligence is a highly valued trait in modern society, but researchers have not found an association between IQ scores and happiness (Diener, Kesebir, & Tov, 2009). Educational attainment also appears to be unrelated to life satisfaction (Ross & Van Willigen, 1997).

Physical attractiveness. Good-looking people enjoy a variety of advantages in comparison to unattractive people. Given that physical attractiveness is an important resource in Western society, we might expect attractive people to be happier than others, but the available data indicate that the correlation between attractiveness and happiness is negligible (Diener, Wolsic, & Fujita, 1995).

What Is Somewhat Important?

Research has identified four facets of life that appear to have a moderate impact on subjective well-being: health, social activity, religious belief, and culture.

Health. Good physical health would seem to be an essential requirement for happiness, but people adapt to health problems. Research reveals that individuals who develop serious, disabling health conditions aren't as unhappy as one might guess (Riis et al., 2005). Good health may not, by itself, produce happiness, because people tend to take good health for granted. Such considerations may help explain why researchers find only a moderate positive correlation (average = .32) between health status and subjective well-being (Argyle, 1999). While health may promote happiness to a moderate degree, happiness may also foster better health, as research has found a positive correlation between happiness and longevity (Veenhoven, 2008).

Social activity. Humans are social animals, and people's interpersonal relations *do* appear to contribute to their happiness. People who are satisfied with their friendship networks and who are socially active report above-average levels of happiness (Diener & Seligman, 2004). And people who score as exceptionally happy tend to report greater satisfaction with their social relations than others (Diener & Seligman, 2002). One recent study that periodically recorded participants' daily conversations found that people who had more deep, substantive conversations were happier than those who mostly engaged in small talk (Mehl et al., 2010). This finding is not all that surprising, in that one would expect that people with richer social networks would have more deep conversations.

Religion. The link between religiosity and subjective well-being is modest, but a number of surveys suggest that people with heartfelt religious convictions are more likely to be happy than people who characterize themselves as nonreligious (Myers, 2008). The association between reli-

gion and happiness appears to be stronger in societies where circumstances are difficult and stressful, and it is weaker in more affluent societies where circumstances are less threatening (Diener, Tay, & Myers, 2011). These findings suggest that religion may help people cope with adversity, and they may shed some light on why many people are leaving organized religions in affluent countries, where overall adversity is low.

Culture. Surveys suggest that there are some moderate differences among nations in mean levels of subjective well-being. These differences correlate with economic development, as the nations with the happiest people tend to be affluent and those with the least happy people tend to be among the poorest (Diener, Kesebir, & Tov, 2009). Although wealth is a weak predictor of subjective well-being *within* cultures, comparisons *between* cultures tend to yield rather strong correlations between nations' wealth and their people's average happiness (Tov & Diener, 2007). How do theorists explain this paradox? They believe that national wealth is a relatively easy-to-measure marker associated with a matrix of cultural conditions that influence happiness. Specifically, they point out that nations' economic development correlates with greater recognition of human rights, greater income equality, greater gender equality, and more democratic governance (Tov & Diener, 2007). So, it may not be affluence per se that is the driving force behind cultural disparities in subjective well-being. Consistent with this analysis, a recent study found that income inequality is associated with reduced happiness (Oishi, Kesebir, & Diener, 2011).

What Is Very Important?

The list of factors that turn out to be very important ingredients of happiness is surprisingly short. Only a few variables are strongly related to overall happiness.

Love, marriage, and relationship satisfaction. Romantic relationships can be stressful, but people consistently rate being in love as one of the most critical ingredients of happiness (Myers, 1999). Furthermore, although people complain a lot about their marriages, the evidence indicates that marital status is a key correlate of happiness. Among both men and women, married people are happier than people who are single or divorced (Myers & Diener, 1995), and this disparity holds around the world in widely different cultures (Diener et al., 2000). And among married people, marital satisfaction predicts personal well-being (Proulx, Helms, & Buehler, 2007). The research in this area generally has used marital status as a crude but easily measured marker of relationship satisfaction. In all likelihood, it is relationship satisfaction that fosters happiness. In other words, one does not have to be married to be

Research on the correlates of happiness suggests that one key ingredient of subjective well-being is a rewarding work life.

happy. Relationship satisfaction probably has the same association with happiness in cohabiting heterosexual couples and gay couples. In support of this line of thinking, a recent study found that both married and cohabiting people were happier than those who remained single (Musick & Bumpass, 2012).

Work. Given the way people often complain about their jobs, we might not expect work to be a key source of happiness, but it is. Although less critical than relationship satisfaction, job satisfaction is strongly associated with general happiness (Judge & Klinger, 2008). Studies also show that unemployment has strong negative effects on subjective well-being (Lucas et al., 2004). It is difficult to sort out whether job satisfaction causes happiness or vice versa, but evidence suggests that causation flows both ways.

Genetics and personality. The best predictor of individuals' future happiness is their past happiness (Lucas & Diener, 2008). Some people seem destined to be happy and others unhappy, regardless of their triumphs or setbacks. The limited influence of life events was highlighted in a fascinating study that found only modest differences in overall happiness between recent lottery winners and recent accident victims who became quadriplegics (Brickman, Coates, & Janoff-Bulman, 1978). Investigators were amazed that extremely fortuitous and horrible events like these didn't have a dramatic impact on happiness. Actually, *several* lines of evidence suggest that happiness does not depend on external circumstances—buying a nice house, getting promoted—as much as on internal factors, such as one's outlook on life (Lyubomirsky, Sheldon, & Schkade, 2005).

With this finding in mind, researchers have investigated whether a hereditary basis might exist for variations in happiness. These studies suggest that people's genetic predispositions account for a substantial portion of the variance in happiness, perhaps as much as 50% (Lyubomirsky et al., 2005). How can one's genes influence one's happiness? Presumably, by shaping one's temperament and personality, which are known to be highly heritable. Hence, researchers have begun to look for links between personality

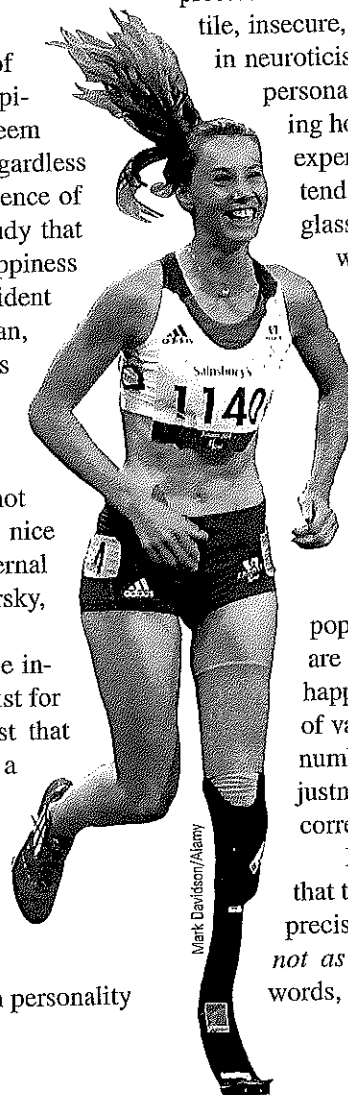


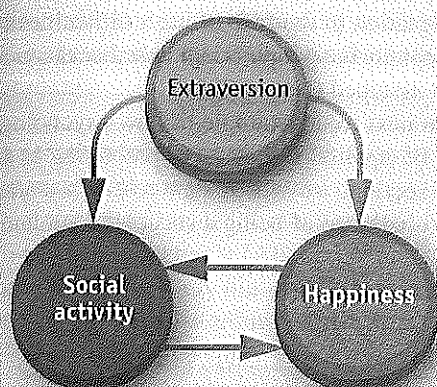
and subjective well-being, and they have found some relatively strong correlations (Steel, Schmidt, & Schultz, 2008). For example, *extraversion* is one of the better predictors of happiness. People who are outgoing, upbeat, and sociable tend to be happier than others. Another potent predictor is *neuroticism*—the tendency to be anxious, hostile, insecure, and self-conscious. Those who score high in neuroticism tend to be less happy than others. Such personality traits may influence happiness by shaping how people recall and evaluate their personal experiences (Zhang & Howell, 2011). Extraverts tend to look at their lives through rose-tinted glasses, leaning toward positive evaluations with few regrets. Those who are neurotic tend to evaluate their experiences with more of a negative slant.

Conclusions

We must be cautious in drawing inferences about the causes of happiness, because most of the available data are correlational (see Figure 1.9). Nonetheless, the empirical evidence suggests that many popular beliefs about the sources of happiness are unfounded. The data also demonstrate that happiness is shaped by a complex constellation of variables. Despite this complexity, however, a number of worthwhile insights about human adjustment can be gleaned from research on the correlates of subjective well-being.

First, research on happiness demonstrates that the determinants of subjective well-being are precisely that: subjective. *Objective realities are not as important as subjective feelings.* In other words, your health, your wealth, your job, and your





© Cengage Learning

Figure 1.9

Possible causal relations among the correlates of happiness. Although we have considerable data on the correlates of happiness, it is difficult to untangle the possible causal relationships. For example, we know that a moderate positive correlation exists between social activity and happiness, but we can't say for sure whether high social activity causes happiness or whether happiness causes people to be more socially active. Moreover, in light of the finding that a third variable—extraversion—correlates with both variables, we have to consider the possibility that extraversion causes both greater social activity and greater happiness.

age are not as influential as how you *feel* about your health, wealth, job, and age (Schwarz & Strack, 1999).

Second, *when it comes to happiness, everything is relative*. In other words, you evaluate what you have relative to what the people around you have. Thus, people who are wealthy assess what they have by comparing themselves to their wealthy friends and neighbors, and their *relative ranking* is crucial (Boyce, Brown, & Moore, 2010). This is one reason for the surprisingly low correlation between wealth and happiness within specific societies. You might have a lovely home, but if it sits next to a neighbor's palatial mansion, this situation might be a source of more dissatisfaction than happiness.

Third, *research on happiness has shown that people are surprisingly bad at predicting what will make them happy*. We assume that we know what is best for us. But research on *affective forecasting*—efforts to predict one's emotional reactions to future events—suggests otherwise (Gilbert, 2006b; Wilson & Gilbert, 2005). People routinely overestimate the pleasure that they will derive from buying an expensive automobile, taking an exotic vacation, earning an important promotion, moving to a beautiful coastal city, or building their dream home (see the Recommended Reading Box and Chapter 6 for more on affective forecasting). Likewise, people tend to overestimate the misery and regret they will experience if they have a romantic breakup, don't get into the college they want, fail to get a promotion, or develop a serious illness. Thus, the roadmap to happiness is less clearly marked than widely assumed.

Fourth, *research on subjective well-being indicates that people often adapt to their circumstances*. This adaptation effect is one reason that an increase in income doesn't necessarily bring an increase in happiness. Thus, *hedonic adaptation* occurs when the mental scale that people use to judge the pleasantness-unpleasantness of their experiences shifts so that their neutral point, or baseline for comparison, is changed (*hedonic* means related to pleasure). Unfortunately, when people's experiences improve,

RECOMMENDED reading

Stumbling on Happiness

by Daniel Gilbert (HarperCollins, 2006)

Do you think you know what will make you happy? Think again. If you read this book, you won't be nearly so confident about what will provide you with pleasure in the years to come. Daniel Gilbert is a Harvard psychologist who has pioneered research on *affective forecasting*—people's tendency to predict their emotional reactions to future events. This research shows that people tend to be reasonably accurate in anticipating whether events will generate positive or negative emotions, but they are often way off the mark in predicting the intensity and duration of their emotional reactions. Why are people's predictions of their emotional reactions surprisingly inaccurate? A number of factors can contribute. One consideration is that people often assume they will spend a lot of time dwelling on a setback or relishing a triumph, but in reality a variety of other events and concerns will compete for their attention. Another consideration is that most people do not fully appreciate just how effective humans tend to be in rationalizing, discounting, and overlooking their failures and mistakes. People exhibit several cognitive biases that help them insulate themselves from the emotional fallout of life's difficulties, but they do not factor this peculiar "talent" into the picture when making predictions about their emotional reactions to setbacks. In this wide-ranging book, Gilbert ventures far beyond the work on affective forecasting, profiling research on a host of related topics (especially peculiarities in decision making), but the central theme is that people's expectations about what will bring them happiness are surprisingly inaccurate. As you may have already gathered, this is not a self-help book per se, but it makes for fascinating reading that has some important implications for the never-ending pursuit of happiness. Although he describes a great deal of research, Gilbert's writing is so accessible, engaging, and humorous, it never feels like a review of research.

Log on to CourseMate at www.cengagebrain.com for descriptions of other recommended books.

hedonic adaptation may *sometimes* put them on a *hedonic treadmill*—their baseline moves upward, so that the improvements yield no real benefits (Kahneman, 1999). However, when people have to grapple with major setbacks, hedonic adaptation probably helps protect their mental and physical health. For example, people who are sent to prison and people who develop debilitating diseases are not as unhappy as one might assume, because they adapt to their changed situations and evaluate events from a new perspec-

tive (Frederick & Loewenstein, 1999). That's not to say that hedonic adaptation in the face of life's difficulties is inevitable or complete, but people adapt to setbacks much better than widely assumed (Lucas, 2007).

We turn next to an example of how psychological research can be applied to everyday problems. In our first application section, we will review research evidence related to the challenge of being a successful student.

Application

IMPROVING ACADEMIC PERFORMANCE

LEARNING OBJECTIVES

- List three steps for developing sound study habits.
- Discuss some strategies for improving reading comprehension and getting more out of lectures.
- Describe various study strategies that can aid memory.

Answer the following "true" or "false."

- 1. If you have a professor who delivers chaotic, hard-to-follow lectures, there is little point in attending class.
- 2. Cramming the night before an exam is an efficient way to study.
- 3. In taking lecture notes, you should try to be a "human tape recorder" (that is, take down everything exactly as said by your professor).
- 4. Outlining reading assignments is a waste of time.

As you will soon learn, all of these statements are false. If you answered them all correctly, you may already have acquired the kinds of skills and habits that lead to academic success. If so, however, you are not typical. Today, a huge number of students enter college with remarkably poor study skills and habits—and it's not entirely their fault. The U.S. educational system generally does not provide much in the way of formal instruction on good study techniques. So, in this first Application, we'll start with the basics and try to remedy this deficiency to some extent by sharing some insights that psychology can provide on how to improve your academic performance. We will discuss how to promote better study habits, how to enhance reading efforts, how to get more out of lectures, and how to make your memory more effective.

Developing Sound Study Habits

People tend to assume that academic performance in college is largely determined by students' intelligence or general mental ability. This belief is supported by the fact that college admissions tests (the SAT and ACT), which basically assess general cognitive ability, predict college

grades fairly well (Kobrin et al., 2008). What is far less well known, however, is that measures of study skills, habits, and attitudes also predict college grades pretty well. In a large-scale review of 344 independent samples consisting of over 72,000 students, Crede and Kuncel (2008) reported that aggregate measures of study skills and habits predicted college grades almost as well as admissions tests did, and that they accounted for variability in performance that the admissions tests could not account for. In other words, this massive review of evidence found that study habits are almost as influential as ability in determining college success. The practical meaning of this finding is that most students probably underestimate the importance of their study skills. And while most adults probably cannot increase their mental ability much, their study habits can usually be enhanced considerably.

In any event, the first step toward effective study habits is to face up to the reality that studying usually involves hard work. You don't have to feel guilty if you don't look forward to studying. Most students don't. Once you accept the premise that studying doesn't come naturally, it should

Learn More Online

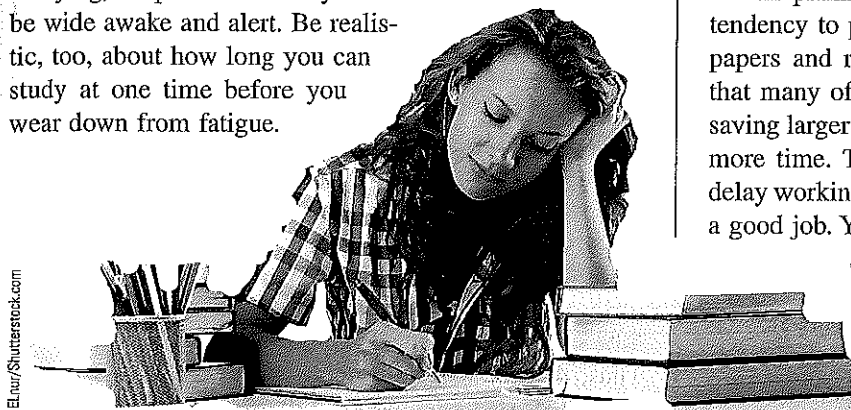
Sites to Promote Academic Success

This site provides links to a number of other sites that provide advice on a diverse array of study-related topics, such as time management, effective note taking, memory-improvement strategies, and test-taking skills. Developed by Linda Walsh, a psychology professor at the University of Northern Iowa, it is an invaluable resource for students seeking to improve their chances of academic success.



be apparent that you need to set up an organized program to promote adequate study. According to Siebert and Karr (2008), such a program should include the following considerations.

Set up a schedule for studying. Research on the differences between successful and unsuccessful college students suggests that successful students monitor and regulate their use of time more effectively (Allgood et al., 2000). If you wait until the urge to study hits you, you may still be waiting when the exam rolls around. Thus, it is important to allocate definite times to study. Review your time obligations (work, housekeeping, and so on) and figure out in advance when you can study. In allotting certain times to studying, keep in mind that you need to be wide awake and alert. Be realistic, too, about how long you can study at one time before you wear down from fatigue.



Allow time for study breaks; they can revive sagging concentration.

It's important to write down your study schedule (Tracy, 2006). Doing so serves as a reminder and increases your commitment to the schedule. As shown in Figure 1.10, you should begin by setting up a general schedule for the quarter or semester. Then, at the beginning of each week, plan the specific assignments that you intend to work on during each study session. This approach should help you avoid cramming for exams at the last minute. Cramming is an ineffective study strategy for most students (Wong, 2012). It will strain your memorization capabilities, can tax your energy level, and may stoke the fires of test anxiety.

In planning your weekly schedule, try to avoid the tendency to put off working on major tasks such as term papers and reports. Time management experts point out that many of us tend to tackle simple, routine tasks first, saving larger tasks for later, when we supposedly will have more time. This common tendency leads many of us to delay working on major assignments until it's too late to do a good job. You can avoid this trap by breaking major assignments into smaller component tasks that you schedule individually.

Find a place to study where you can concentrate. Where you study is also important. The key is to find a place where distractions are likely to be minimal. Most people cannot study effectively while watching TV, listening to loud music, or overhearing conversations. Don't depend on willpower to carry you through these distractions. It's much easier to plan ahead and avoid the distractions altogether.

Reward your studying. One of the reasons it is so difficult to motivate oneself to study regularly is that the payoffs for studying often lie in the distant future. The ultimate reward, a degree, may be years away. Even shorter-term rewards, such as an A in the course, may be weeks or months off. To combat this problem, it helps to give yourself immediate rewards for studying. It is easier to motivate yourself to study if you reward yourself with a tangible payoff, such as a snack, TV show, or phone call to a friend, when you finish. Thus, you should set realistic study goals and then reward yourself when you meet them.

	MON	TUES	WED	THURS	FRI	SAT	SUN
8 A.M.						Work	
9 A.M.	History	Study	History	Study	History	Work	
10 A.M.	Psych	French	Psych	French	Psych	Work	
11 A.M.	Study		Study		Study	Work	
Noon	Math	Study	Math	Study	Math	Work	Study
1 P.M.							Study
2 P.M.	Study	English	Study	English	Study		Study
3 P.M.	Study		Study		Study		Study
4 P.M.							
5 P.M.							
6 P.M.	Work	Study	Work				Study
7 P.M.	Work	Study	Work				Study
8 P.M.	Work	Study	Work				Study
9 P.M.	Work	Study	Work				Study
10 P.M.	Work		Work				

Figure 1.10

Example of an activity schedule. One student's general activity schedule for a semester is shown here. Each week the student fills in the specific assignments to work on during the upcoming study sessions.

Improving Your Reading

Much of your study time is spent reading and absorbing information. The keys to improving reading comprehension are to preview reading assignments section by section, work hard to actively process the meaning of the information, strive to identify the key ideas of each paragraph, and carefully review these key ideas after each section. Modern textbooks often contain a variety of learning aids that you can use to improve your reading. If a book provides a chapter outline, chapter summary, or learning objectives, don't ignore them. These study elements can help you recognize the important points in the chapter. A lot of effort and thought go into formulating these and other textbook learning aids. It is wise to take advantage of them.

Another important issue related to textbook reading is whether and how to mark up one's reading assignments. Many students deceive themselves into thinking that they are studying by running a marker through a few sentences here and there in their text. If they do so without thoughtful selectivity, they are simply turning a textbook into a coloring book. This reality probably explains why some professors are skeptical about the value of highlighting textbooks. Nonetheless, research suggests that highlighting textbook material *is* a useful strategy—if students are reasonably effective in focusing on the main ideas in the material and if they subsequently review what they have highlighted (Caverly, Orlando, & Mullen, 2000).

When executed effectively, highlighting can foster active reading, improve reading comprehension, and reduce the amount of material that one has to review later (Van Blerkom, 2012). The key to effective text marking is to identify (and highlight) only the main ideas, key supporting details, and technical terms. Most textbooks are carefully crafted such that every paragraph has a purpose for being there. Try to find the sentence or two that best captures the purpose of each paragraph. Text marking is a delicate balancing act. If you highlight too little of the content, you are not identifying enough of the key ideas. But if you highlight too much of the content, you are not going to succeed in condensing what you have to review to a manageable size.

Other methods can also be used to enhance the effectiveness of your reading. One approach is to read a section of text and then set it aside and try to recall as much of the information as possible; then review the material again and repeat the recall effort. A study of this *retrieval practice* approach found it to be clearly superior to simple repeated study for an equal amount of time and even to elaborate concept-mapping procedures (Karpicke & Blunt, 2011). A related approach is to read a passage and then set it aside and generate questions about the passage, which you then try to an-

swer. A study of this strategy found that it yielded greater mastery of material than simply reading and rereading sections of text (Weinstein, McDermott, & Roediger, 2010).

Getting More out of Lectures

Although lectures are sometimes boring and tedious, it is a simple fact that poor class attendance is associated with poor grades. For example, Lindgren (1969) found that absences from class were much more common among “unsuccessful” students (grade average of C– or below) than among “successful” students (grade average of B or above), as shown in **Figure 1.11**. Even when you have an instructor who delivers hard-to-follow lectures from which you learn virtually nothing, it is still important to go to class. If nothing else, you'll get a feel for how the instructor thinks. Doing so can help you anticipate the content of exams and respond in the manner your professor expects.

Fortunately, most lectures are reasonably coherent. Studies indicate that attentive note taking *is* associated with enhanced learning and performance in college classes (Titsworth & Kiewra, 2004). However, research also shows that many students' lecture notes are surprisingly incomplete, with the average student often recording less than 40% of the crucial ideas in a lecture (Armbruster, 2000). Thus, the key to getting more out of lectures is to stay motivated, stay attentive, and expend the effort to make your notes as complete as possible. Books on study skills (Downing, 2011; McWhorter & Sember, 2013) offer a number of suggestions on how to take good-quality lecture notes. These suggestions include:

- *Use active listening procedures.* With active listening, you focus full attention on the speaker. Try to anticipate what's coming and search for deeper meanings. Pay

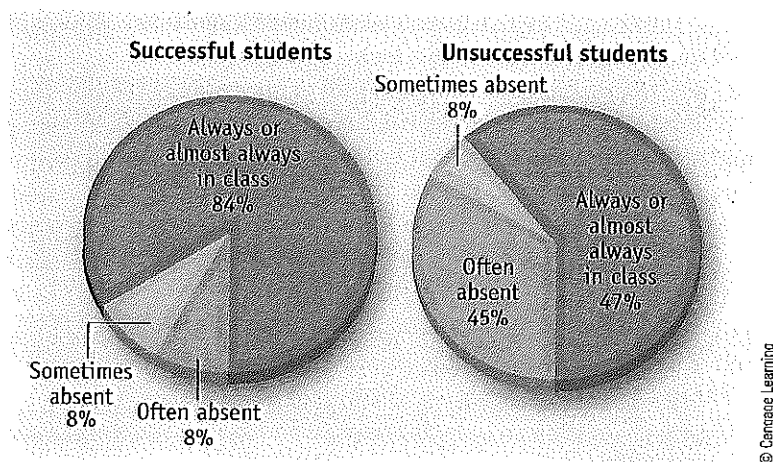
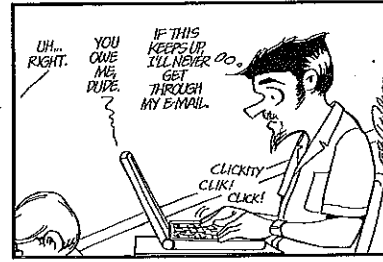
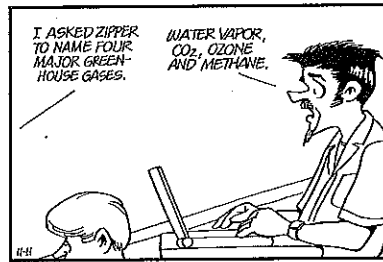
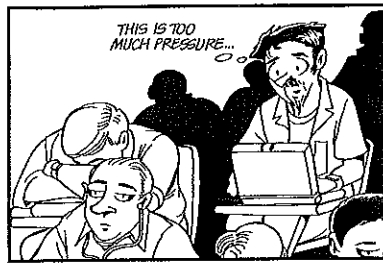


Figure 1.11

Successful and unsuccessful students' class attendance. Lindgren (1969) found that attendance was much better among successful students than unsuccessful students.

DOONESBURY

by G.B. Trudeau



DOONESBURY G. B. Trudeau. Reprinted with permission of UNIVERSAL UCLICK. All rights reserved.

attention to nonverbal signals that may serve to further clarify the lecturer's intent or meaning.

- *Prepare for lectures by reading ahead on the scheduled subject in your text.* If you review the text, you have less information to digest that is brand new. This strategy is especially important when course material is complex and difficult.

- *Write down lecturers' thoughts in your own words.* Don't try to be a human tape recorder. Translating the lecture into your own words forces you to organize the ideas in a way that makes sense to you.

- *Look for subtle and not-so-subtle clues about what the instructor considers to be important.* These clues may range from simply repeating main points to saying things like "You'll run into this again."

- *Ask questions during lectures.* Doing so keeps you actively involved and allows you to clarify points you may have misunderstood. Many students are more bashful about asking questions than they should be. They don't realize that most professors welcome questions.

Applying Memory Principles

Scientific investigation of memory processes dates back to 1885, when Hermann Ebbinghaus published a series of insightful studies. Since then, psychologists have discovered a number of principles about memory that are relevant to helping you improve your study skills.

Engage in Adequate Practice

Practice makes perfect, or so you've heard. In reality, practice is not likely to guarantee perfection, but repeatedly reviewing information usually leads to improved retention. Studies show that retention improves with increased rehearsal (Greene, 1992). Evidence suggests that it even pays to overlearn material. **Overlearning is continued rehearsal of material after you have first appeared to master it.** In one classic study, after participants mastered a list of nouns (they recited the list without error), Krueger (1929) required them to continue rehearsing for 50% or 100% more trials (repetitions). Measuring retention at intervals of up to 28 days, Krueger found that overlearning led to better recall of the list. Modern studies have also shown that overlearning can enhance performance on an exam that occurs within a week, although the evidence on its long-term benefits (months later) is inconsistent (Rohrer et al., 2005).

Although the benefits of practice are well known, people have a curious tendency to overestimate their knowledge of a topic and how well they will perform on a subsequent memory test of this knowledge (Koriat & Bjork, 2005). After studying material, people also tend to underestimate the value of additional study and practice (Kornell et al., 2011). That's why it is a good idea to informally test yourself on information you think you have mastered before confronting a real test. In addition to checking your mastery, recent research suggests that

testing actually enhances retention, a phenomenon dubbed the *testing effect* (Roediger & Butler, 2011). Studies have shown that taking a test on material increases performance on a subsequent test even more than studying for an equal amount of time (see **Figure 1.12**). The favorable effects of testing are enhanced if participants are provided feedback on their test performance (Butler & Roediger, 2008). Moreover, studies have demonstrated that the laboratory findings on the testing effect replicate in real-world educational settings (McDaniel et al., 2011; Roediger et al., 2011). Unfortunately, given the recent nature of this discovery, relatively few students are aware of the value of testing (Karpicke, Butler, & Roediger, 2009).

Why is testing so beneficial? The key appears to be that testing forces students to engage in effortful retrieval of information, which promotes future retention (Roediger et al., 2010). Indeed, even *unsuccessful* retrieval efforts can enhance retention (Kornell, Hays, & Bjork, 2009). In any event, self-testing appears to be an excellent memory tool, which suggests that it would be prudent to take the Practice Tests in this text or additional tests available on the website for the book.

Use Distributed Practice

Let's assume that you are going to study 9 hours for an exam. Is it better to "cram" all of your study into one

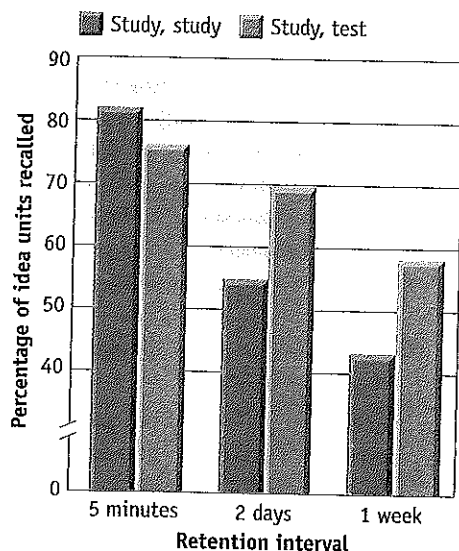


Figure 1.12

The testing effect. In one study by Roediger and Karpicke (2006b), participants studied a brief prose passage for 7 minutes. Then, some of them studied it again for 7 minutes while others took a 7-minute test on the material. In the second phase of the study, subjects took another test on the material after either 5 minutes, 2 days, or 1 week. There wasn't much of a performance gap when subjects were tested over a 5-minute retention interval, but the testing group showed a significant advantage in recall when the retention interval was extended to 2 days or 1 week.

Source: Roediger, III, H. L., & Karpicke, J. D. (2006). Test-enhanced learning: Taking memory tests improves long-term retention. *Psychological Science*, 17, 3, 249–255. Copyright © 2006 Blackwell Publishing. Reprinted by permission of Sage Publications.

9-hour period (massed practice) or distribute it among three 3-hour periods on successive days (distributed practice)? The evidence indicates that retention tends to be greater after distributed practice than massed practice (Kornell et al., 2010; Rohrer & Pashler, 2010). More recently, a review of over 300 experiments (Cepeda et al., 2008) showed that the longer the retention interval between studying and testing, the bigger the advantage for spaced practice, as shown in **Figure 1.13**. The same review concluded that the longer the retention interval, the longer the optimal "break" between practice trials. When an upcoming test is more than two days away, the optimal interval between practice periods appears to be around 24 hours. The superiority of distributed practice over massed practice provides another reason why cramming is an ill-advised approach to studying for exams.

Organize Information

Retention tends to be greater when information is well organized (Einstein & McDaniel, 2004). Hierarchical organization is particularly helpful when it is applicable. Thus, it may be a good idea to *outline* reading assignments in school. Consistent with this reasoning, there is some empirical evidence that outlining material from textbooks can enhance retention of the material (McDaniel, Waddill, & Shakesby, 1996).

Emphasize Deep Processing

One line of research suggests that how *often* you go over material is less critical than the *depth* of processing that you engage in (Craik & Tulving, 1975). Thus, if you expect to remember what you read, you have to wrestle fully with its meaning (Einstein & McDaniel, 2004). Many students could probably benefit if they spent less time on rote repetition and more on actually paying attention to and analyzing the meaning of their reading assignments. In particular, it is useful to make material *personally* meaningful. When you read your textbooks, try to relate information to your own life and experience. For example, if you're reading in your psychology text about the personality trait of assertiveness, you can think about which people you know who are particularly assertive and why you would characterize them as being that way.

Use Mnemonic Devices

Of course, it's not always easy to make something personally meaningful. When you study chemistry, you may have a hard time relating to polymers at a personal level. This problem has led to the development of many *mnemonic devices*, or strategies for enhancing memory, that are designed to make abstract material more meaningful.

Acrostics and acronyms. *Acrostics* are phrases (or poems) in which the first letter of each word (or line) functions as

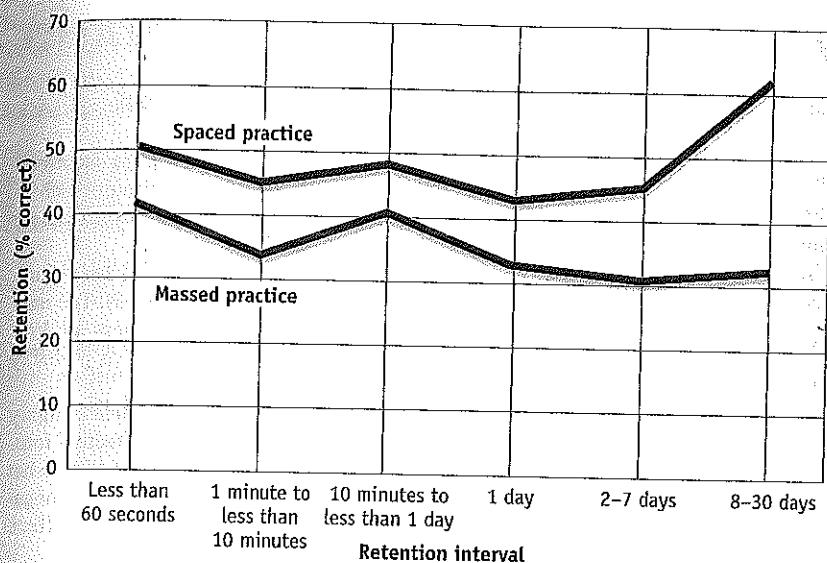


Figure 1.13

Effects of massed versus distributed practice on retention. In a review of over 300 experiments on massed versus distributed practice, Cepeda et al. (2006) examined the importance of the retention interval. As you can see, spaced practice was superior to massed practice at all retention intervals, but the gap widened at longer intervals. These findings suggest that distributed practice is especially advantageous when you need or want to remember material over the long haul. (Based on data from Cepeda et al., 2006)

a cue to help you recall the abstract words that begin with the same letter. For instance, you may remember the order of musical notes with the saying "Every good boy does fine" (or "deserves favor"). A variation on acrostics is the *acronym*—a word formed out of the first letters of a series of words. Students memorizing the order of colors in the light spectrum often store the name "Roy G. Biv" to remember red, orange, yellow, green, blue, indigo, and violet. Acrostics and acronyms that individuals create for themselves can be effective memory tools (Hermann, Raybeck, & Gruneberg, 2002).

Link method. The *link method* involves forming a mental image of items to be remembered in a way that links them together. For instance, suppose you are going to stop at the drugstore on the way home and you need to remember to pick up a news magazine, shaving cream, film, and pens. To remember these items, you might visualize a public

figure likely to be in the magazine shaving with a pen while being photographed. Some researchers suggest that the more bizarre the images, the better they will be remembered (Iaccino, 1996).

Method of loci. The *method of loci* involves taking an imaginary walk along a familiar path where you have associated images of items you want to remember with certain locations. The first step is to commit to memory a series of loci, or places along a path. Usually these loci are specific locations in your home or neighborhood. Then envision each thing you want to remember in one of these locations. Try to form distinctive, vivid images. When you need to remember the items, imagine yourself walking along the path. The various loci on your path should serve as retrieval cues for the images that you formed (see Figure 1.14). The method of loci assures that items are remembered in their correct order because the order is determined by the sequence of locations along the pathway. Empirical studies have supported the value of this method for memorizing lists (Massen & Vaterrodt-Plünnecke, 2006). One study found that using loci along a pathway from home to work was more effective than a pathway through one's home (Massen et al., 2009).

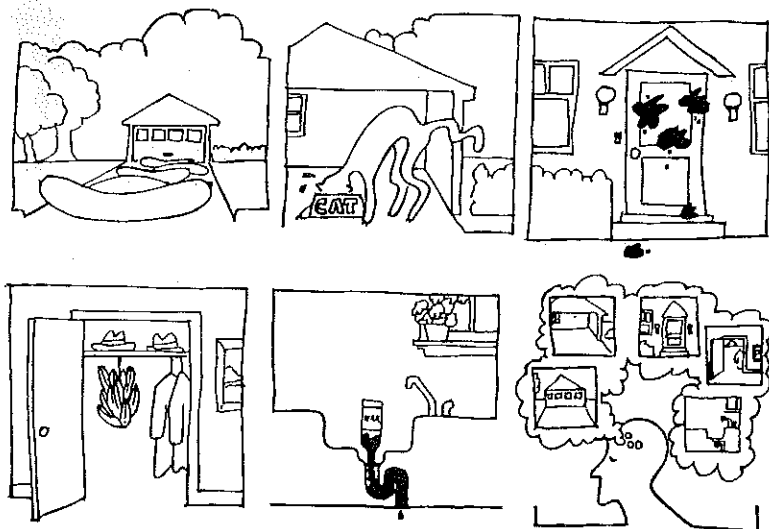


Figure 1.14

The method of loci. In this example from Bower (1970), a person about to go shopping pairs items to be remembered with familiar places (loci) arranged in a natural sequence: (1) hot dogs/driveway; (2) cat food/garage; (3) tomatoes/front door; (4) bananas/coat closet; (5) whiskey/kitchen sink. As the last panel shows, the shopper recalls the items by mentally touring the loci associated with them.

Source: Adapted from Bower, G. H. (1970). Analysis of a mnemonic device. *American Scientist*, 58, 496-499. Copyright © 1970 by Scientific Research Society. Reprinted by permission.

CHAPTER 7 | Review

KEY IDEAS

THE PARADOX OF PROGRESS

- Although our modern era has seen great technological progress, personal problems have not diminished. In spite of many time-saving devices, people tend to have less free time. The life choices available to people have increased greatly, but evidence suggests that choice overload undermines individuals' happiness.
- Although we have unprecedented control over the world around us, we seem to create as many problems as we solve. Thus, many theorists argue that technological progress has brought new, and possibly more difficult, adjustment problems.

THE SEARCH FOR DIRECTION

- According to many theorists, the basic challenge of modern life has become the search for a sense of direction and meaning. This search has many manifestations, including the appeal of self-realization programs, religious cults, and media "therapists."
- The enormous popularity of self-help books is an interesting manifestation of people's struggle to find a sense of direction. Some self-help books offer worthwhile advice, but most are dominated by psychobabble and are not based on scientific research. Many also lack explicit advice on how to change behavior and some encourage a self-centered, narcissistic approach to interpersonal interactions.
- Although this text deals with many of the same issues as self-realization programs, self-help books, and other types of pop psychology, its philosophy and approach are quite different. This text is based on the premise that accurate knowledge about the principles of psychology can be of value in everyday life.

THE PSYCHOLOGY OF ADJUSTMENT

- Psychology is both a science and a profession that focuses on behavior and related mental and physiological processes. Adjustment is a broad area of study in psychology concerned with how people adapt effectively or ineffectively to the demands and pressures of everyday life.

THE SCIENTIFIC APPROACH TO BEHAVIOR

- The scientific approach to understanding behavior is empirical. Psychologists base their conclusions on formal, systematic, objective tests of their hypotheses, rather than reasoning, speculation, or common sense. The scientific approach is advantageous in that it puts a premium on clarity and has little tolerance for error.
- Experimental research involves manipulating an independent variable to discover its effect on a dependent variable. The experimenter usually does so by comparing experimental and control groups, which must be alike except for the variation created by the manipulation of the independent variable. Experiments permit conclusions about cause-effect relationships between variables, but this method isn't usable for the study of many questions.
- Psychologists conduct correlational research when they are unable to exert control over the variables they want to study. The correlation coefficient is a numerical index of the degree of relationship between two variables. Correlational research methods include naturalistic observation, case studies, and surveys. Correlational research facilitates the investigation of many issues that are not open to experimental study, but it cannot demonstrate that two variables are causally related.

THE ROOTS OF HAPPINESS: AN EMPIRICAL ANALYSIS

- A scientific analysis of happiness reveals that many common-sense notions about the roots of happiness appear to be incorrect, including the notion that most people are unhappy. Factors such as money, age, gender, parenthood, intelligence, and attractiveness are only weakly correlated with subjective well-being.
- Physical health, social relationships, religious faith, and culture appear to have a modest impact on feelings of happiness. The only factors that are clearly and strongly related to happiness are love and marriage, work satisfaction, and personality, which probably reflects the influence of heredity.
- Happiness is a relative concept mediated by people's highly subjective assessments of their lives. Research on affective forecasting shows that people are surprisingly bad at predicting what will make them happy. Individuals adapt to both positive and negative events in their lives, which creates a hedonic treadmill effect.

APPLICATION: IMPROVING ACADEMIC PERFORMANCE

- Evidence suggests that study habits are almost as influential as ability in determining college success. To foster sound study habits, you should devise a written study schedule and reward yourself for following it. You should also try to find places for studying that are relatively free of distractions.
- You should use active reading techniques to select the most important ideas from the material you read. Highlighting textbook material is a useful strategy—if you are reasonably effective in focusing on the main ideas in the material and if you subsequently review what you have highlighted. Good note taking can help you get more out of lectures. It's important to use active listening techniques and to record lecturers' ideas in your own words.
- Rehearsal, even when it involves overlearning, facilitates retention. The process of being tested on material seems to enhance retention of that material. Distributed practice and deeper processing tend to improve memory. Evidence also suggests that organization facilitates retention, so outlining reading assignments can be valuable.
- Meaningfulness can be enhanced through the use of mnemonic devices such as acrostics and acronyms. The link method and the method of loci are mnemonic devices that depend on the value of visual imagery.

KEY TERMS

Adjustment p. 10	Experimental group p. 12
Affective forecasting p. 21	Hedonic adaptation p. 21
Behavior p. 10	Independent variable p. 12
Case study p. 15	Mnemonic devices p. 26
Clinical psychology p. 10	Narcissism p. 7
Control group p. 12	Naturalistic observation p. 14
Correlation p. 13	Overlearning p. 25
Correlation coefficient p. 13	Psychology p. 10
Dependent variable p. 12	Subjective well-being p. 17
Empiricism p. 11	Surveys p. 15
Experiment p. 12	

CHAPTER 7 | Practice Test

1. Technological advances have not led to perceptible improvement in our collective health and happiness. This statement defines
 - a. escape from freedom.
 - b. the point/counterpoint phenomenon.
 - c. modern society.
 - d. the paradox of progress.
2. Barry Schwartz (2004) argues that
 - a. life choices have increased dramatically in modern society.
 - b. the abundance of life choices has unexpected costs.
 - c. an overabundance of choices increases the potential for rumination and postdecision regret.
 - d. all of the above are true.
3. Which of the following is *not* offered in the text as a criticism of self-help books?
 - a. They are infrequently based on solid research.
 - b. Most don't provide explicit directions for changing behavior.
 - c. The topics they cover are often quite narrow.
 - d. Many are dominated by psychobabble.
4. The adaptation of animals when environments change is similar to _____ in humans.
 - a. orientation
 - b. assimilation
 - c. evolution
 - d. adjustment
5. An experiment is a research method in which the investigator manipulates the _____ variable and observes whether changes occur in a (an) _____ variable as a result.
 - a. independent; dependent
 - b. control; experimental
 - c. experimental; control
 - d. dependent; independent
6. A researcher wants to determine whether a certain diet causes children to learn better in school. In this study, the independent variable is
 - a. the type of diet.
 - b. a measure of learning performance.
 - c. the age or grade level of the children.
 - d. the intelligence level of the children.
7. A psychologist collected background information about a psychopathic killer, talked to him and people who knew him, and gave him psychological tests. Which research method was she using?
 - a. Case study
 - b. Naturalistic observation
 - c. Survey
 - d. Experiment
8. The principal advantage of experimental research is that
 - a. it has a scientific basis and is therefore convincing to people.
 - b. experiments replicate real-life situations.
 - c. an experiment can be designed for any research problem.
 - d. it allows the researcher to draw cause-and-effect conclusions.
9. Research has shown that which of the following is moderately correlated with happiness?
 - a. Income
 - b. Intelligence
 - c. Parenthood
 - d. Social activity
10. A good reason for taking notes in your own words, rather than verbatim, is that
 - a. most lecturers are quite wordy.
 - b. "translating" on the spot is good mental exercise.
 - c. it reduces the likelihood that you'll later engage in plagiarism.
 - d. it forces you to assimilate the information in a way that makes sense to you.

ANSWERS

- | | |
|-------|-------------|
| 1. d | Pages 1-2 |
| 2. d | Pages 1-2 |
| 3. c | Pages 7-9 |
| 4. d | Page 10 |
| 5. a | Page 12 |
| 6. a | Page 12 |
| 7. a | Page 15 |
| 8. d | Page 12 |
| 9. d | Pages 17-19 |
| 10. d | Page 25 |

COURSEMATE



Go to **CengageBrain.com** to access Psychology CourseMate, where you will find an interactive eBook, glossaries, flashcards, quizzes, videos, and more.

PERSONAL EXPLORATIONS WORKBOOK

Go to the *Personal Explorations Workbook* in the back of your textbook for exercises that can enhance your self-understanding in relation to issues raised in this chapter.

Exercise 1.1 Self-Assessment: Narcissistic Personality Inventory

Exercise 1.2 Self-Reflection: What Are Your Study Habits Like?

CHAPTER 6 THE SELF

EXERCISE 6.1 Self-Assessment: Self-Monitoring Scale

INSTRUCTIONS

The statements below concern your personal reactions to a number of situations. No two statements are exactly alike, so consider each statement carefully before answering. If a statement is true or mostly true as applied to you, mark T as your answer. If a statement is false or not usually true as applied to you, mark F as your answer. It is important that you answer as frankly and as honestly as you can. Record your responses in the spaces provided on the left.

The Scale

- _____ 1. I find it hard to imitate the behavior of other people.
- _____ 2. My behavior is usually an expression of my true inner feelings, attitudes, and beliefs.
- _____ 3. At parties and social gatherings, I do not attempt to do or say things that others will like.
- _____ 4. I can only argue for ideas I already believe.
- _____ 5. I can make impromptu speeches even on topics about which I have almost no information.
- _____ 6. I guess I put on a show to impress or entertain people.
- _____ 7. When I am uncertain how to act in a social situation, I look to the behavior of others for cues.
- _____ 8. I would probably make a good actor.
- _____ 9. I rarely need the advice of my friends to choose movies, books, or music.
- _____ 10. I sometimes appear to others to be experiencing deeper emotions than I actually am.
- _____ 11. I laugh more when I watch a comedy with others than when alone.
- _____ 12. In a group of people I am rarely the center of attention.
- _____ 13. In different situations and with different people, I often act like very different persons.
- _____ 14. I am not particularly good at making other people like me.
- _____ 15. Even if I am not enjoying myself, I often pretend to be having a good time.
- _____ 16. I'm not always the person I appear to be.
- _____ 17. I would not change my opinions (or the way I do things) in order to please someone else or win their favor.
- _____ 18. I have considered being an entertainer.
- _____ 19. In order to get along and be liked, I tend to be what people expect me to be rather than anything else.
- _____ 20. I have never been good at games like charades or improvisational acting.
- _____ 21. I have trouble changing my behavior to suit different people and different situations.
- _____ 22. At a party, I let others keep the jokes and stories going.
- _____ 23. I feel a bit awkward in company and do not show up quite so well as I should.
- _____ 24. I can look anyone in the eye and tell a lie with a straight face (if for a right end).
- _____ 25. I may deceive people by being friendly when I really dislike them.

Scoring the Scale

The scoring key is reproduced below. You should circle your response of true or false each time it corresponds to the keyed response below. Add up the number of responses you circle. This total is your score on the Self-Monitoring Scale. Record your score below.

1. False	6. True	11. True	16. True	21. False
2. False	7. True	12. False	17. False	22. False
3. False	8. True	13. True	18. True	23. False
4. False	9. False	14. False	19. True	24. True
5. True	10. True	15. True	20. False	25. True

My Score _____

What the Scale Measures

Developed by Mark Snyder (1974), the Self-Monitoring (SM) Scale measures the extent to which you consciously use impression management strategies in social interactions. Basically, the scale assesses the degree to which you manipulate the nonverbal signals that you send to others and the degree to which you adjust your behavior to situational demands. Research shows that some people work harder at managing their public images than others do.

In his original study, Snyder (1974) reported very reasonable test-retest reliability (.83 for one month) and, for an initial study, provided ample evidence regarding the scale's validity. In assessing the validity of the scale, he found that in comparison to low SM subjects, high SM subjects were rated by peers as being better at emotional self-control and better at figuring out how to behave appropriately in new social situations. Furthermore, Snyder found that stage actors tended to score higher on the scale than undergraduates, as one would expect. Additionally, Ickes and Barnes (1977) summarize evidence that high SM people are (1) very sensitive to situational cues, (2) particularly skilled at detecting deception on the part of others, and (3) especially insightful about how to influence the emotions of others.

Interpreting Your Score

Our norms are based on guidelines provided by Ickes and Barnes (1977). The divisions are based on data from 207 undergraduate subjects.

Norms	
High score:	15-22
Intermediate score:	9-14
Low score:	0-8

Source: From Snyder, M. (1974). Self-monitoring of expressive behavior. *Journal of Personality and Social Psychology*, 330, 526-537. Table 1, p. 531 (adapted). Copyright © 1974 by the American Psychological Association. Adapted with permission of the publisher and Mark Snyder. No further reproduction or distribution is permitted without written permission from the American Psychological Association.

CHAPTER 16 POSITIVE PSYCHOLOGY

EXERCISE 16.1 Self-Assessment: What Is Your Happiness Profile?

INSTRUCTIONS

All of the questions below reflect statements that many people would find desirable, but answer only in terms of whether the statement describes how you actually live your life. Please be honest and accurate. Use the following scale to answer the questions:

- 5 = Very much like me
- 4 = Mostly like me
- 3 = Somewhat like me
- 2 = A little like me
- 1 = Not like me at all

The Scale

- _____ 1. My life serves a higher purpose.
- _____ 2. Life is too short to postpone the pleasures it can provide.
- _____ 3. I seek out situations that challenge my skills and abilities.
- _____ 4. I keep score at life.
- _____ 5. Whether at work or play, I am usually "in a zone" and not conscious of myself.
- _____ 6. I am always very absorbed in what I do.
- _____ 7. I am rarely distracted by what is going on around me.
- _____ 8. I have a responsibility to make the world a better place.
- _____ 9. My life has a lasting meaning.
- _____ 10. No matter what I am doing, it is important for me to win.
- _____ 11. In choosing what to do, I always take into account whether it will be pleasurable.
- _____ 12. What I do matters to society.
- _____ 13. I want to accomplish more than other people.
- _____ 14. I agree with this statement: "Life is short—eat dessert first."
- _____ 15. I love to do things that excite my senses.
- _____ 16. I love to compete.

Scoring the Scale

Your Orientation to Pleasure score is the sum of points for questions 2, 11, 14, and 15; your Orientation to Engagement score is the sum of points for questions 3, 5, 6, and 7; your Orientation to Meaning score is the sum of points for questions 1, 8, 9, and 12; your Orientation to Victory score is the sum of points for questions 4, 10, 13, and 16.

My Orientation to Pleasure Score _____

My Orientation to Engagement Score _____

My Orientation to Meaning Score _____

My Orientation to Victory Score _____

Interpreting Your Scores

The questionnaire measures four possible routes to happiness: through pleasure, engagement, meaning, and victory. What is your highest score of the four? This is your dominant orientation. And what is the configuration of your scores? That is, are you "high" (> 15) on all four orientations? If so, you are oriented toward a full life and are likely to be highly satisfied. Or are you "low" (< 9) on all four orientations? If so, you may have a more empty life and are likely to be dissatisfied. You might consider doing something different—anything!—in your life. And if you are high on one or two orientations, chances are that you are satisfied with life, although you might seek further opportunities for pursuing your signature way of being happy.

Source: Based on Peterson, C. (2006). *A primer in positive psychology*. New York: Oxford University Press; and Peterson, C., Park, N., & Sellman, M. E. P. (2005). Orientations to happiness and life satisfaction: The full life versus the empty life. *Journal of Happiness Studies*, 6, 25–41.