

# Module 2

## Psychology's Big Issues and Approaches

### Module Learning Objectives

- 2-1** Summarize the nature–nurture debate in psychology.
- 2-2** Describe psychology's three main levels of analysis and related perspectives.
- 2-3** Identify psychology's main subfields.
- 2-4** Explain how psychological principles can help you learn and remember, and do better on the AP® exam.

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The young science of psychology developed from the more established fields of philosophy and biology. Wundt was both a philosopher and a physiologist. James was an American philosopher. Freud was an Austrian physician. Ivan Pavlov, who pioneered the study of learning (Module 26), was a Russian physiologist. Jean Piaget, the last century's most influential observer of children (Module 47), was a Swiss biologist. These “Magellans of the mind,” as Morton Hunt (1993) has called them, illustrate psychology's origins in many disciplines and many countries.

Like those early pioneers, today's psychologists are citizens of many lands. The International Union of Psychological Science has 71 member nations, from Albania to Zimbabwe. In China, the first university psychology department began in 1978; by 2008 there were nearly 200 (Han, 2008; Tversky, 2008). Moreover, thanks to international publications, joint meetings, and the Internet, collaboration and communication now cross borders. Psychology is *growing* and it is *globalizing*. The story of psychology—the subject of this book—continues to develop in many places, at many levels, with interests ranging from the study of nerve cell activity to the study of international conflicts.

Across the world, psychologists are debating enduring issues, viewing behavior from the differing perspectives offered by the subfields in which they teach, work, and do research.

### Psychology's Biggest Question

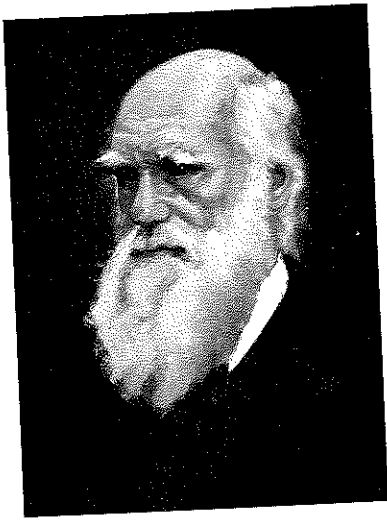
- 2-1** What is psychology's historic big issue?

Are our human traits present at birth, or do they develop through experience? This has been psychology's biggest and most persistent issue. As we have seen, the debate over the **nature–nurture issue** is ancient. The ancient Greeks debated this, with Plato assuming that we

#### AP® Exam Tip

Pay close attention to what David Myers, your author, is emphasizing as he tells the story of psychology. When he says the nature–nurture issue is the *biggest* question in psychology, that's a sign. It's a safe bet that this concept will be covered on the AP® exam.

**nature–nurture issue** the longstanding controversy over the relative contributions that genes and experience make to the development of psychological traits and behaviors. Today's science sees traits and behaviors arising from the interaction of nature and nurture.



**Charles Darwin** Darwin argued that natural selection shapes behaviors as well as bodies.

**natural selection** the principle that, among the range of inherited trait variations, those contributing to reproduction and survival will most likely be passed on to succeeding generations.

**A nature-made nature–nurture experiment** Because identical twins have the same genes, they are ideal participants in studies designed to shed light on hereditary and environmental influences on intelligence, personality, and other traits. Studies of identical and fraternal twins provide a rich array of findings—described in later modules—that underscore the importance of both nature and nurture.



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Tony Freeman/Photo Edit

inherit character and intelligence and that certain ideas are also inborn, and Aristotle countering that there is nothing in the mind that does not first come in from the external world through the senses.

In the 1600s, philosophers rekindled the debate. Locke rejected the notion of inborn ideas, suggesting that the mind is a blank slate on which experience writes. Descartes disagreed, believing that some ideas are innate. Descartes' views gained support from a curious naturalist two centuries later. In 1831, an indifferent student but ardent collector of beetles, mollusks, and shells set sail on a historic round-the-world journey. The 22-year-old voyager, Charles Darwin, pondered the incredible species variation he encountered, including tortoises on one island that differed from those on nearby islands. Darwin's 1859 *On the Origin of Species* explained this diversity by proposing the evolutionary process of **natural selection**: From among chance variations, nature selects traits that best enable an organism to survive and reproduce in a particular environment. Darwin's principle of natural selection—what philosopher Daniel Dennett (1996) has called “the single best idea anyone has ever had”—is still with us 150+ years later as biology's organizing principle. Evolution also has become an important principle for twenty-first-century psychology. This would surely have pleased Darwin, for he believed his theory explained not only animal structures (such as a polar bear's white coat) but also animal behaviors (such as the emotional expressions associated with human lust and rage).

The nature–nurture issue recurs throughout this text as today's psychologists explore the relative contributions of biology and experience, asking, for example, how we humans are alike (because of our common biology and evolutionary history) and diverse (because of our differing environments). Are gender differences biologically predisposed or socially constructed? Is children's grammar mostly innate or formed by experience? How are intelligence and personality differences influenced by heredity and by environment? Are sexual behaviors more “pushed” by inner biology or “pulled” by external incentives? Should we treat psychological disorders—depression, for example—as disorders of the brain, disorders of thought, or both?

Such debates continue. Yet over and over again we will see that in contemporary science the nature–nurture tension dissolves: *Nurture works on what nature endows*. Our species is biologically endowed with an enormous capacity to learn and adapt. Moreover, every psychological event (every thought, every emotion) is simultaneously a biological event. Thus, depression can be both a brain disorder and a thought disorder.

## Psychology's Three Main Levels of Analysis

### 2.2 What are psychology's levels of analysis and related perspectives?

Each of us is a complex system that is part of a larger social system. But each of us is also composed of smaller systems, such as our nervous system and body organs, which are composed of still smaller systems—cells, molecules, and atoms.

These tiered systems suggest different **levels of analysis**, which offer complementary outlooks. It's like explaining why horrific school shootings have occurred. Is it because the shooters have brain disorders or genetic tendencies that cause them to be violent? Because they have been rewarded for violent behavior? Because we, in the United States, live in a gun-promoting society that accepts violence? Such perspectives are complementary because "everything is related to everything else" (Brewer, 1996). Together, different levels of analysis form an integrated **biopsychosocial approach**, which considers the influences of biological, psychological, and social-cultural factors (**FIGURE 2.1**).

**levels of analysis** the differing complementary views, from biological to psychological to social-cultural, for analyzing any given phenomenon.

**biopsychosocial approach** an integrated approach that incorporates biological, psychological, and social-cultural levels of analysis.

#### Biological influences:

- natural selection of adaptive traits
- genetic predispositions responding to environment
- brain mechanisms
- hormonal influences

#### Psychological influences:

- learned fears and other learned expectations
- emotional responses
- cognitive processing and perceptual interpretations

Behavior or mental process

#### Social-cultural influences:

- presence of others
- cultural, societal, and family expectations
- peer and other group influences
- compelling models (such as in the media)

Figure 2.1

**Biopsychosocial approach** This integrated viewpoint incorporates various levels of analysis and offers a more complete picture of any given behavior or mental process.

### AP® Exam Tip

You will see versions of Figure 2.1 throughout the text. Spend some time right now familiarizing yourself with how the figure's three corners might contribute to behavior or mental processes, the very stuff of psychology.

Each level provides a valuable vantage point for looking at a behavior or mental process, yet each by itself is incomplete. Like different academic disciplines, psychology's varied approaches, or perspectives, ask different questions and have their own limits. One perspective may stress the biological, psychological, or social-cultural level more than another, but the different perspectives described in **TABLE 2.1** on the next page complement one another. Consider, for example, how they shed light on anger.



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**Views of anger** How would each of psychology's levels of analysis explain what's going on here?

Table 2.1 Psychology's Approaches

Perspective	Focus	Sample Questions
<i>Behavioral</i>	How we learn observable responses	How do we learn to fear particular objects or situations? What is the most effective way to alter our behavior, say, to lose weight?
<i>Biological</i>	How the body and brain enable emotions, memories, and sensory experiences; how genes combine with environment to influence individual differences	How do pain messages travel from the hand to the brain? How is blood chemistry linked with moods and motives? To what extent are traits such as intelligence, personality, sexual orientation, and depression attributable to our genes? To our environment?
<i>Cognitive</i>	How we encode, process, store, and retrieve information	How do we use information in remembering? Reasoning? Solving problems?
<i>Evolutionary</i>	How the natural selection of traits has promoted the survival of genes	How does evolution influence behavior tendencies?
<i>Humanistic</i>	How we meet our needs for love and acceptance and achieve self-fulfillment	How can we work toward fulfilling our potential? How can we overcome barriers to our personal growth?
<i>Psychodynamic</i>	How behavior springs from unconscious drives and conflicts	How can someone's personality traits and disorders be explained by unfulfilled wishes and childhood traumas?
<i>Social-cultural</i>	How behavior and thinking vary across situations and cultures	How are we alike as members of one human family? How do we differ as products of our environment?

**AP® Exam Tip**

These perspectives will come up again and again throughout your AP® Psychology course, and they *will* be on the exam. You need to become very comfortable with the meaning of terms like cognitive, behavioral, and psychodynamic. Ask your teacher for clarification if you are the least bit unclear about what the perspectives mean.

**behavioral psychology** the scientific study of observable behavior, and its explanation by principles of learning.

**biological psychology** the scientific study of the links between biological (genetic, neural, hormonal) and psychological processes. (Some biological psychologists call themselves *behavioral neuroscientists*, *neuropsychologists*, *behavior geneticists*, *physiological psychologists*, or *biopsychologists*.)

- Someone working from the **behavioral** perspective might attempt to determine which external stimuli trigger angry responses or aggressive acts.
- Someone working from a **biological** perspective might study brain circuits that cause us to be “red in the face” and “hot under the collar,” or how heredity and experience influence our individual differences in temperament.
- Someone working from the **cognitive** perspective might study how our interpretation of a situation affects our anger and how our anger affects our thinking.
- Someone working from the **evolutionary** perspective might analyze how anger facilitated the survival of our ancestors' genes.
- Someone working from the *humanistic* perspective (a historically important approach) might have been interested in understanding how angry feelings affect a person's potential for growth. As we will see, modern-day *positive psychology* incorporates humanistic psychology's emphasis on human flourishing.
- Someone working from the **psychodynamic** perspective (which evolved from Freud's psychoanalysis) might view an outburst as an outlet for unconscious hostility.
- Someone working from the **social-cultural** perspective might explore how expressions of anger vary across cultural contexts.

*The point to remember:* Like two-dimensional views of a three-dimensional object, each of psychology's perspectives is helpful. But each by itself fails to reveal the whole picture.

## Psychology's Subfields

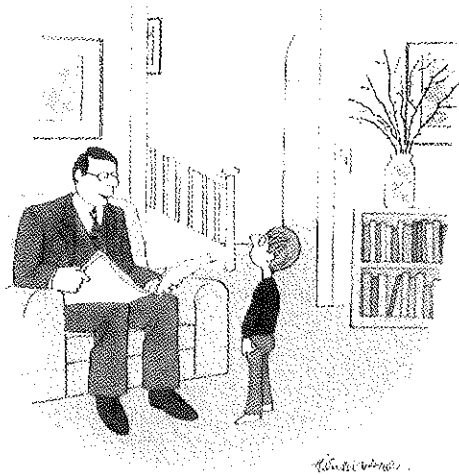
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What are psychology's main subfields?

Picturing a chemist at work, you probably envision a white-coated scientist surrounded by glassware and high-tech equipment. Picture a psychologist at work and you would be right to envision

- a white-coated scientist probing a rat's brain.
- an intelligence researcher measuring how quickly an infant shows boredom by looking away from a familiar picture.
- an executive evaluating a new "healthy lifestyles" training program for employees.
- someone at a computer analyzing data on whether adopted teens' temperaments more closely resemble those of their adoptive parents or their biological parents.
- a therapist listening carefully to a client's depressed thoughts.
- a researcher visiting another culture and collecting data on variations in human values and behaviors.
- a teacher or writer sharing the joy of psychology with others.

The cluster of subfields we call psychology is a meeting ground for different disciplines. "Psychology is a hub scientific discipline," said Association for Psychological Science president John Cacioppo (2007). Thus, it's a perfect home for those with wide-ranging interests. In its diverse activities, from biological experimentation to cultural comparisons, the tribe of psychology is united by a common quest: *describing and explaining behavior and the mind underlying it*. There is even a branch of psychology devoted to studying the measurement of our abilities, attitudes, and traits: **psychometrics**.



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*"I'm a social scientist, Michael. That means I can't explain electricity or anything like that, but if you ever want to know about people I'm your man."*

**cognitive psychology** the scientific study of all the mental activities associated with thinking, knowing, remembering, and communicating.

**evolutionary psychology** the study of the evolution of behavior and mind, using principles of natural selection.

**psychodynamic psychology** a branch of psychology that studies how unconscious drives and conflicts influence behavior, and uses that information to treat people with psychological disorders.

**social-cultural psychology** the study of how situations and cultures affect our behavior and thinking.

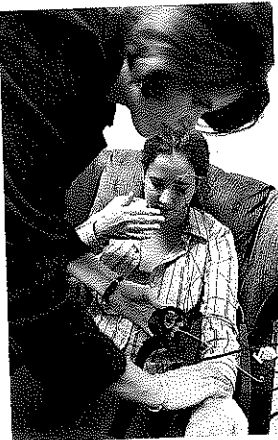
**psychometrics** the scientific study of the measurement of human abilities, attitudes, and traits.



Laura Dwight

**I see you!** A biological psychologist might view this child's delighted response as evidence of brain maturation. A cognitive psychologist might see it as a demonstration of the baby's growing knowledge of his surroundings. For a social-cultural psychologist, the role of grandparents in different societies might be the issue of interest. As you will see throughout this book, these and other perspectives offer complementary views of behavior.





**Psychology: A science and a profession** Psychologists experiment with, observe, test, and treat behavior. Here we see psychologists testing a child, measuring emotion-related physiology, and doing group therapy.

**basic research** pure science that aims to increase the scientific knowledge base.

**developmental psychology** a branch of psychology that studies physical, cognitive, and social change throughout the life span.

**educational psychology** the study of how psychological processes affect and can enhance teaching and learning.

**personality psychology** the study of an individual's characteristic pattern of thinking, feeling, and acting.

**social psychology** the scientific study of how we think about, influence, and relate to one another.

### AP® Exam Tip

Take careful note of the fact that psychiatry is a medical specialty and not a part of psychology. Can you summarize the similarities and differences among counseling psychologists, clinical psychologists, and psychiatrists?

Some psychologists conduct **basic research** that builds psychology's knowledge base. In the pages that follow we will meet a wide variety of such researchers, including

- **biological psychologists** exploring the links between brain and mind.
- **developmental psychologists** studying our changing abilities from womb to tomb.
- **cognitive psychologists** experimenting with how we perceive, think, and solve problems.
- **educational psychologists** studying influences on teaching and learning.
- **personality psychologists** investigating our persistent traits.
- **social psychologists** exploring how we view and affect one another.

(Read on to the next module for a more complete list of what psychologists in various professions do and where they work.)

These and other psychologists also may conduct **applied research**, tackling practical problems. **Industrial-organizational (I/O) psychologists**, for example, use psychology's concepts and methods in the workplace to help organizations and companies select and train employees, boost morale and productivity, design products, and implement systems. Within that domain, **human factors psychologists** focus on the interaction of people, machines, and physical environments. (More on this subject in Enrichment Module 82.)

Although most psychology textbooks focus on psychological science, psychology is also a helping profession devoted to such practical issues as how to have a happy marriage, how to overcome anxiety or depression, and how to raise thriving children. As a science, psychology at its best bases such interventions on *evidence of effectiveness*. **Counseling psychologists** help people to cope with challenges and crises (including academic, vocational, and marital issues) and to improve their personal and social functioning. **Clinical psychologists** assess and treat mental, emotional, and behavior disorders. Both counseling and clinical psychologists administer and interpret tests, provide counseling and therapy, and sometimes conduct basic and applied research. By contrast, **psychiatrists**, who also may provide psychotherapy, are medical doctors licensed to prescribe drugs and otherwise treat physical causes of psychological disorders.

We will study the history of therapy, including the role of pioneering Dorothea Dix, in the Therapy unit. Reformers such as Dix and Philippe Pinel led the way to humane treatment of those with psychological disorders.

To balance historic psychology's focus on human problems, Martin Seligman and others (2002, 2005, 2011) have called for more research on human strengths and human flourishing.

Their **positive psychology** scientifically explores “positive emotions, positive character traits, and enabling institutions.” What, they ask, can psychology contribute to a “good life” that engages one’s skills, and a “meaningful life” that points beyond oneself?

Rather than seeking to change people to fit their environment, **community psychologists** work to create social and physical environments that are healthy for all (Bradshaw et al., 2009; Trickett, 2009). For example, if school bullying is a problem, some psychologists will seek to change the bullies. Knowing that many students struggle with the transition from elementary to middle school, they might train individual kids how to cope. Community psychologists instead seek ways to adapt the school experience to early adolescent needs.

To prevent bullying, they might study how the school and neighborhood foster bullying.

With perspectives ranging from the biological to the social, and with settings from the laboratory to the clinic, psychology relates to many fields. As we will see in Module 3, psychologists teach in medical schools, law schools, and high schools, and they work in hospitals, factories, and corporate offices. They engage in interdisciplinary studies, such as psychohistory (the psychological analysis of historical characters), psycholinguistics (the study of language and thinking), and psychoceramics (the study of crackpots).<sup>1</sup>

Psychology also influences modern culture. Knowledge transforms us. Learning about the solar system and the germ theory of disease alters the way people think and act. Learning about psychology’s findings also changes people: They less often judge psychological disorders as moral failings, treatable by punishment and ostracism. They less often regard and treat women as men’s mental inferiors. They less often view and rear children as ignorant, willful beasts in need of taming. “In each case,” noted Morton Hunt (1990, p. 206), “knowledge has modified attitudes, and, through them, behavior.” Once aware of psychology’s well-researched ideas—about how body and mind connect, how a child’s mind grows, how we construct our perceptions, how we remember (and misremember) our experiences, how people across the world differ (and are alike)—your mind may never again be quite the same.

But bear in mind psychology’s limits. Don’t expect it to answer the ultimate questions, such as those posed by Russian novelist Leo Tolstoy (1904): “Why should I live? Why should I do anything? Is there in life any purpose which the inevitable death that awaits me does not undo and destroy?”

Although many of life’s significant questions are beyond psychology, some very important ones are illuminated by even a first psychology course. Through painstaking research, psychologists have gained insights into brain and mind, dreams and memories, depression and joy. Even the unanswered questions can renew our sense of mystery about “things too wonderful” for us yet to understand. And, as you will see in Modules 4–8, your study of psychology can help teach you how to ask and answer important questions—how to think critically as you evaluate competing ideas and claims.

Psychology deepens our appreciation for how we humans perceive, think, feel, and act. By so doing, it can indeed enrich our lives and enlarge our vision. Throughout this book I hope to help guide you toward that end. As educator Charles Eliot said a century ago: “Books are the quietest and most constant of friends, and the most patient of teachers.”



Dorothea Dix (1802–1887)

“I . . . call your attention to the state of the Insane Persons confined within this Commonwealth, in cages.”

**applied research** scientific study that aims to solve practical problems.

**industrial-organizational (I/O) psychology** the application of psychological concepts and methods to optimizing human behavior in workplaces.

**human factors psychology** an I/O psychology subfield that explores how people and machines interact and how machines and physical environments can be made safe and easy to use.

**counseling psychology** a branch of psychology that assists people with problems in living (often related to school, work, or marriage) and in achieving greater well-being.

**clinical psychology** a branch of psychology that studies, assesses, and treats people with psychological disorders.

**psychiatry** a branch of medicine dealing with psychological disorders; practiced by physicians who sometimes provide medical (for example, drug) treatments as well as psychological therapy.

**positive psychology** the scientific study of human functioning, with the goals of discovering and promoting strengths and virtues that help individuals and communities to thrive.

**community psychology** a branch of psychology that studies how people interact with their social environments and how social institutions affect individuals and groups.

“Once expanded to the dimensions of a larger idea, [the mind] never returns to its original size.” —OLIVER WENDELL HOLMES, 1809–1894

<sup>1</sup>Confession: I wrote the last part of this sentence on April Fools’ Day.

## Close-up

## Improve Your Retention—and Your Grades!

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How can psychological principles help you learn and remember, and do better on the AP® exam?

Do you, like most students, assume that the way to cement your new learning is to reread? What helps even more—and what this book therefore encourages—is repeated self-testing and rehearsal of previously studied material. Memory researchers Henry Roediger and Jeffrey Karpicke (2006) call this phenomenon the **testing effect**. They note that “testing is a powerful means of improving learning, not just assessing it.” In one of their studies, students recalled the meaning of 40 previously learned Swahili words much better if tested repeatedly than if they spent the same time restudying the words (Karpicke & Roediger, 2008).

As you will see in Modules 31–33, to master information you must *actively process it*. Your mind is not like your stomach, something to be filled passively; it is more like a muscle that grows stronger with exercise. Countless experiments reveal that people learn and remember best when they put material in their own words, rehearse it, and then retrieve and review it again.

The **SQ3R** study method incorporates these principles (McDaniel et al., 2009; Robinson, 1970). SQ3R is an acronym for its five steps: Survey, Question, Read, Retrieve,<sup>2</sup> Review.

To study a module, first *survey*, taking a bird's-eye view. Scan the headings, and notice how the module is organized.

Before you read each main section, try to answer its numbered Learning Objective Question (for this box: “How can psychological principles help you learn and remember, and do better on the AP® exam?”). Roediger and Bridgid Finn (2010) have found that “trying and failing to retrieve the answer is actually helpful to learning.” Those who test their understanding before reading, and discover what they don't yet know, will learn and remember better.

Then *read*, actively searching for the answer to the question. At each sitting, read only as much of the module (usually a single main section) as you can absorb without tiring. Read actively and critically. Ask questions. Take notes. Make the ideas your own: How does what you've read relate to your own life? Does it support or challenge your assumptions? How convincing is the evidence?

Having read a section, *retrieve* its main ideas. *Test yourself*. This will not only help you figure out what you know; the testing itself will help you learn and retain the information more effectively. Even better, test yourself repeatedly. To facilitate this, I offer self-testing opportunities in each module—for example,

in the *Before You Move On* sections. After answering the *Test Yourself* questions there, you can check your answers in Appendix E at the end of this text and reread as needed.

Finally, *review*: Read over any notes you have taken, again with an eye on the module's organization, and quickly review the whole module. Write or say what a concept is before rereading to check your understanding.

Survey, question, read, retrieve, review. I have organized this book's modules to facilitate your use of the SQ3R study system. Each module begins with a list of objectives that aid your *survey*. Headings and the numbered Learning Objective Questions at the beginning of main sections suggest issues and concepts you should consider as you *read*. The material is organized into sections of readable length. At the end of main sections is a “Before You Move On” box with Ask Yourself and Test Yourself questions that help you *retrieve* what you know. The Module Review provides answers to the learning objective questions along with helpful review questions. The Unit Review offers a list of Key Terms and Key Contributors, along with AP® Exam Practice Questions. Appendix C, Psychological Science's Key Contributors, at the end of the text will also be an important review tool—especially in preparing for the AP® exam. In addition to learning psychology's key concepts and key people, you will also need to learn the style of writing that is required for success on the exam. The sample grading rubrics provided for some of the *Free-Response Questions* (essay-style questions) in the Module and Unit Reviews will help get you started.

Five additional study tips may further boost your learning:

**Distribute your study time.** One of psychology's oldest findings is that *spaced practice* promotes better retention than *massed practice*. You'll remember material better if you space your time over several study periods—perhaps one hour a day, six days a week—rather than cram it into one long study blitz. For example, rather than trying to read an entire module in a single sitting, read just one main section and then turn to something else. *Interleaving* your study of psychology with your study of other subjects boosts long-term retention and protects against overconfidence (Kornell & Bjork, 2008; Taylor & Rohrer, 2010).

Spacing your study sessions requires a disciplined approach to managing your time. (Richard O. Straub explains time management in a helpful preface at the beginning of this text.)

**testing effect** enhanced memory after retrieving, rather than simply rereading, information. Also sometimes referred to as a *retrieval practice effect* or *test-enhanced learning*.

**SQ3R** a study method incorporating five steps: Survey, Question, Read, Retrieve, Review.

<sup>2</sup> Also sometimes called “Recite.”



**Close-up** (continued)

**Learn to think critically.** Whether you are reading or in class, note people's assumptions and values. What perspective or bias underlies an argument? Evaluate evidence. Is it anecdotal? Or is it based on informative experiments? (More on this in Module 6.) Assess conclusions. Are there alternative explanations?

**Process class information actively.** Listen for the main ideas and sub-ideas of a lesson. *Write them down.* Ask questions during and after class. In class, as with your homework, process the information actively and you will understand and retain it better. As psychologist William James urged a century ago, "*No reception without reaction, no impression without . . . expression.*" Make the information your own. Take notes in your own words. Relate what you read to what you already know. Tell someone else about it. (As any teacher will confirm, to teach is to remember.)

**Overlearn.** Psychology tells us that overlearning improves retention. We are prone to overestimating how much we know. You may understand a module as you read it, but that feeling of familiarity can be deceptively comforting. By devoting extra study time to testing yourself, you may retain your new knowledge much more effectively.

**Be a smart test-taker.** If a test contains both multiple-choice questions and an essay question, turn first to the essay. Read the question carefully, noting exactly what the teacher is asking. On the back of a page, pencil in a list of points you'd like to make and then organize them. Before writing, put aside the essay and work through the multiple-choice questions. (As you do so, your mind may continue to mull over the essay question. Sometimes the multiple-choice questions will bring pertinent thoughts to mind.) Then reread the essay question, rethink your answer, and start writing. When you finish, proof-read your answer to eliminate spelling and grammatical errors that make you look less competent than you are.

When reading multiple-choice questions, don't confuse yourself by trying to imagine how each choice might be the right one. Instead, try to answer each question as if it were a fill-in-the-blank question. First cover the answers and form a sentence in your mind, recalling what you know to complete the sentence. Then read the answers on the test and find the alternative that best matches your own answer.

Memory experts Elizabeth Bjork and Robert Bjork (2011, p. 63) offer the bottom line for how to improve your retention and your grades:

Spending less time on the input side and more time on the output side, such as summarizing what you have read from memory or getting together with friends and asking each other questions. Any activities that involve testing yourself—that is, activities that require you to retrieve or generate information, rather than just representing information to yourself—will make your learning both more durable and flexible.



## Before You Move On

### ► ASK YOURSELF

When you signed up for this course, what did you think psychology would be all about?

### ► TEST YOURSELF

What are psychology's major levels of analysis?

*Answers to the Test Yourself questions can be found in Appendix E at the end of the book.*

## Module 2 Review

### 2-1 What is psychology's historic big issue?

- Psychology's biggest and most enduring issue has been the *nature–nurture issue*, which focuses on the relative contributions of genes and experience.
- Charles Darwin's view that *natural selection* shapes behaviors as well as bodies is an important principle in contemporary psychology.
- Today's science emphasizes the interaction of genes and experiences in specific environments.

### 2-2 What are psychology's levels of analysis and related perspectives?

- The *biopsychosocial approach* integrates information from three differing but complementary levels of analysis: the biological, psychological, and social-cultural.
- This approach offers a more complete understanding than could usually be reached by relying on only one of psychology's current perspectives (*biological, evolutionary, psychodynamic, behavioral, cognitive, and social-cultural*) or historically influential perspectives (such as the *humanistic approach*).

### 2-3 What are psychology's main subfields?

- Within the science of psychology, researchers may conduct *basic research* to increase the field's knowledge base (often in biological, *developmental*, cognitive, *educational*, *personality*, and *social psychology*) or *applied research* to

solve practical problems (in *industrial-organizational* and *human factors psychology*).

- *Psychometric* psychologists study measurement methods.
- Those who engage in psychology as a helping profession may assist people as *counseling psychologists* (helping people with problems in living or achieving greater well-being) or as *clinical psychologists*, studying and assessing people with psychological disorders and treating them with psychotherapy. (*Psychiatrists* also study, assess, and treat people with disorders, but as medical doctors, they may prescribe drugs in addition to psychotherapy.)
- *Positive psychology* attempts to discover and promote traits that help people to thrive.
- *Community psychologists* work to create healthy social and physical environments.

### 2-4 How can psychological principles help you learn and remember, and do better on the AP® exam?

- The *testing effect* shows that learning and memory are enhanced by actively retrieving, rather than simply rereading, previously studied material.
- The SQ3R study method—survey, question, read, retrieve, and review—applies the principles derived from memory research.
- Five additional tips are (1) distribute your study time; (2) learn to think critically; (3) process class information actively; (4) overlearn; (5) be a smart test-taker.

## Multiple-Choice Questions

1. Which of the following perspectives is most likely to address how the encoding, storing, and retrieval of information might alter our thoughts?
  - a. Behavioral
  - b. Psychodynamic
  - c. Humanistic
  - d. Cognitive
  - e. Biological
2. Who among the following would most likely study the interaction of people, machines, and physical environments?
  - a. Human factors psychologist
  - b. Personality psychologist
  - c. Industrial-organizational psychologist
  - d. Counseling psychologist
  - e. Experimental psychologist

3. Psychiatrists differ from psychologists in that they
  - a. help people cope with challenges and crises.
  - b. conduct research.
  - c. explore how we view and affect one another.
  - d. experiment with how people perceive, think, and solve problems.
  - e. are medical doctors licensed to prescribe medication.
4. A humanistic psychologist working with some poets might ask which of the following questions?
  - a. How can we get them to reach their highest potential?
  - b. How did their childhood experiences impact their current behavior?
  - c. How have rewards and punishments shaped their behavior?
  - d. How do society's attitudes affect their writing topics?
  - e. How do their brains differ from those of other successful people?
5. Betsy works in a human resources department. She plans training sessions, recruits people to work for the company, and implements techniques to boost morale around the office. Of the following, Betsy is most likely a(n)
  - a. developmental psychologist.
  - b. personality psychologist.
  - c. counseling psychologist.
  - d. educational psychologist.
  - e. industrial-organizational psychologist.

## Practice FRQs

1. George is said to have an "easy-going" personality. How might the biopsychosocial approach be used to explain an easy-going personality?

### Answer

*1 point:* Biological factors would include George's genetic, physiological, and chemical makeup. For instance, George's easy-going manner may be the result of brain chemistry.

*1 point:* Psychological factors would include a discussion of how George learned that an easy-going personality makes people want to spend time with him. In response, he keeps anxiety and negative feelings to himself. He has the perception that others do not want to deal with his stress and anxiety.

*1 point:* Social-cultural factors would include George's family or cultural upbringing and expectations. If those who surround George expect him to be relaxed and laid-back, and this is what is supported in his community, George will be likely to act accordingly.

2. Six months ago, Carlos emigrated from Spain to the United States. Although fluent in English and an honor student in Spain, Carlos has had difficulty completing his assignments since moving to the United States. His parents don't understand why he is not succeeding like he did in his last school. Carlos has quit participating in family traditions.

Explain how each of the following psychological perspectives might explain Carlos' behavior:

- Psychodynamic
- Cognitive

(2 points)