

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

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

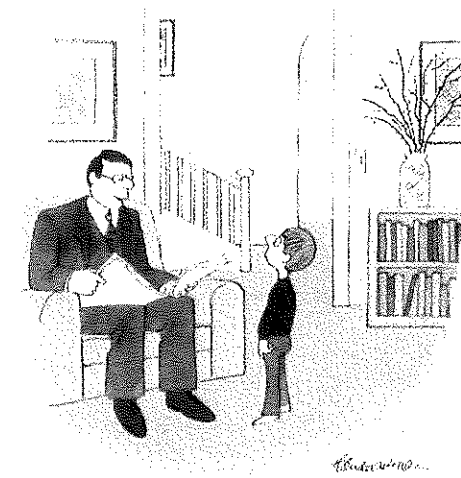
Picturing a chemist at work, you probably envision a white-coated scientist surrounded by glassware and high-tech equipment. Picture a psychologist at work and you would be right to envision

- 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**.



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.



*“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.”*

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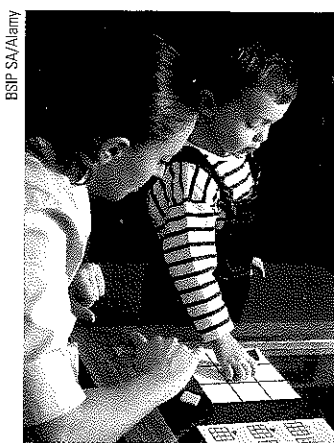
**cognitive psychology** the scientific study of all the mental activities associated with thinking, knowing, remembering, and communicating.

**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.



**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>

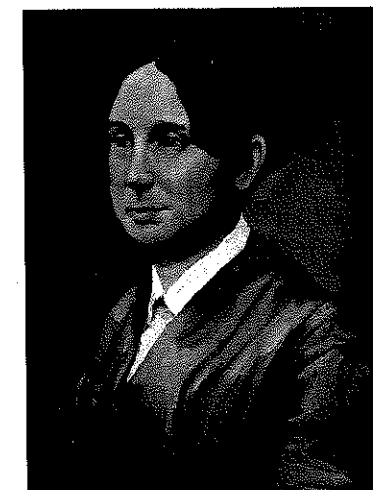
Psychology also influences modern culture. Knowledge transforms us. Learning about the solar system and the germ theory of disease alters the way people think and act. Learning about psychology's findings also changes people: They less often judge psychological disorders as moral failings, treatable 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."

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



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