

The World of Psychology

In this chapter, you will learn about:

- what psychology is and what psychologists do
- how the field of psychology developed
- different approaches to understanding behavior

Do violent video games encourage violent behavior? What are the best colors to use in a fast-food restaurant? Why do some people worry more than others? Why do people in a crowd behave differently from when they are alone? These are questions that people in the field of psychology try to answer.

From earliest recorded history, people have developed explanations for why and how they behave as they do. The first experimental psychology laboratory was founded in 1879, and the modern field of psychology began. Wilhelm Wundt and others studied the conscious mind. Sigmund Freud offered explanations about the unconscious.

The definition of psychology has changed over the years with research findings, cultural variations, and the refinement of scientific methodology. Today, it is defined as the study of mind and behavior. A variety of perspectives influences the way today's psychologists approach their work.

What Is Psychology?

Is there anything you've done today that made you wonder, "Why'd I do that?" Have you ever heard people in school or on the news say, "How could anyone do something like that?" Psychology tries to answer such questions.

Psychology is the study of the mind and behavior. The word comes from two Greek words: *psyche*, meaning "life" or "self," and *logos*, referring to reasoning and logic. The term **behavior** includes every measurable internal and external activity a living thing does. Some behaviors can be observed. Others—such as the actions of the mind, ideas, and strategies—cannot. Emotional states, attitudes, stress, the way we interact with our environment, physical reactions such as "butterflies in the stomach"—all these are included in behavior.

What Psychologists Do

Many people think of psychologists as people who help others solve their problems, but that is only a small part of what they do. The American Psychological Association lists **five** major areas in which psychologists work.

1. Psychologists Conduct Research. Many psychologists conduct research, both in the laboratory and in natural settings. They study animal behavior, individual behavior, and the behavior of complex social organizations, such as companies or prison populations.

Psychologists study infants, students, the elderly, emotionally disturbed people, computer workers, truck drivers, or families. They research how the environment affects human behavior, how art or music affects mental states, and how advertising can be made more effective. Just about any area of human behavior is a potential topic for research.

2. Psychologists Promote Physical and Mental Health. Psychologists work to help people change unhealthy behaviors that cause problems in their lives. Phobias, compulsions, anxieties, and eating disorders are just a few of the issues that psychologists address. Psychologists may work with people individually or in groups.

Many psychologists are members of health care teams where the physical, emotional, and psychological factors of illness are all acknowledged and treated together.

3. Psychologists Help People Learn. Psychologists use tools from research to help people learn. They can help students with motivation. They can provide effective strategies for taking in new information, organizing it, and remembering it. They can provide relief for test anxiety and help with other learning-related issues.

School psychologists provide counseling services and may help students with learning disabilities or with behavior that disrupts their own learning and that of others.

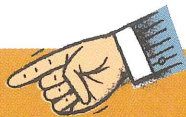
4. Psychologists Work in the Community.

Psychologists work with organizations such as Boys' and Girls' Clubs, community centers, religious organizations, and other service organizations. They work with correctional facilities and with juvenile offenders to help people in trouble cope with their problems and become productive members of society.

5. Psychologists Contribute to the Work Environment.

Psychologists are involved in designing comfortable and less stressful work environments, in recommending organizational changes to reduce employee stress, and in helping to design "user-friendly" products. Company psychologists run employee assistance programs that help employees with drug or alcohol addiction, depression, and other problems.

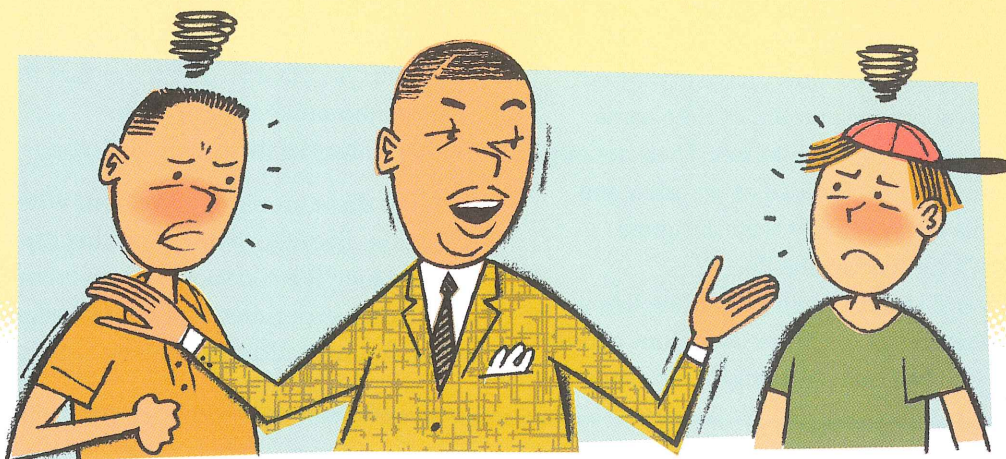
Sidebar



Psychologists at Work

Dr. Rodney Hammond is a health psychologist who works with boys ages 11–14, who are growing up in environments where violence is a common behavior. Dr. Hammond teaches the boys to recognize situations that could lead to violence and develop skills for responding to conflict. With early intervention, these young men are less likely to use violence or become victims of it.

Dr. Barbara Brauer was born deaf. She is one of about 25 deaf psychologists in the country and is the first deaf woman to become a psychologist. Dr. Brauer worked in a unit for deaf people, doing individual, group, and family therapy. She has translated paper-and-pencil types of psychological tests into sign language in videotape format so that deaf people can take the tests on computers.



The Main Types of Psychology

Work in psychology may be divided into two types: basic research and applied psychology. Basic researchers try, among other things, to find out how and why people behave as they do. They compare the effectiveness of different treatments. Applied psychologists use the knowledge gained from research to help people function more efficiently or in a healthier manner.

EXAMPLE: Basic researchers found that adolescents need more sleep than younger children, especially in the morning hours. Some school districts in Minnesota applied this information by changing their high school starting times to a later hour. Their applied psychology resulted in higher grades, fewer discipline problems, and a better-rested student body.

Basic Research

Psychology is a behavioral science. Research psychologists use the scientific method to study people and their behaviors. They conduct experiments and make measurements to discover relationships. Among other things, research psychologists try to determine the influence of the brain on behavior, identify the factors that cause behaviors, and discover the effects of those behaviors. Research is the basis for what we know.

Because human behavior is affected by so many different things, it is impossible to design a perfect research study. Good research acknowledges that there may be explanations of observed behaviors other than those being reported.



Internet Addiction?

Is it possible to be addicted to the Internet? Research topics often come from issues that concern the general population. People on TV and radio talk shows have expressed concern about the amount of time some people spend on the Internet. Their activity has often been described as an addiction. Can this be true? Only well-designed research can determine that.

Several studies have been done using on-line surveys to gather data from people using the Internet. Although there are

many possibilities for error in such experimental design, a significant number of those who responded reported:

- * They couldn't stop using the Internet.
- * Friends and family told them that they spent too much time on-line.
- * Other areas of their lives suffered.

All of these are signs consistent with addiction. Because research on this topic is in its infancy, it is too soon to draw a conclusion. Better experiments must be designed before Internet addiction can be verified.

The Main Types of Psychology

Areas of Study	Basic Research	Applied Psychology
Biological Psychology	Studies the neural, hormonal, and other physical factors that affect behavior.	Helps with addictions, eating disorders, health issues, effects of environmental pollutants or weather on mood, understanding the role of emotions, and anger management.
Cognitive Psychology	Studies how perception, thought, and interpretation affect behaviors and interactions with others.	Provides counseling, therapy, clinical and health psychology, psychotherapy, hypnosis, improved personal growth, and change.
Developmental Psychology	Studies the mental and behavioral changes that occur over the life span of an individual.	Helps parents, teachers, and doctors guide, teach, and heal; designs care for mental retardation and developmental disabilities; helps manage the effects of aging.
Learning and Memory	Studies how new associations are made and how information is stored.	Yields improved curriculum design, effective teaching methods, memory strategies, and school counseling.
Perception	Studies the use of the senses to gain information about the world and give it meaning.	Guides advertising, media design, user-friendly products, interior design for specific effects, and acoustics systems.
Personality	Studies the factors that determine similarities and differences among individuals.	Promotes self-esteem and self-concept, creates appropriate environments for different styles, and works in human resources and personal growth.
Social Psychology	Studies the ways in which human behavior is linked to culture and society.	Works with groups of people—families, ethnic groups, people with alternate lifestyles, religious or community groups, and race relations.

Applied Psychology

Psychology can help us understand every aspect of our lives. From comfort in child-birth to grief and death, from a child's first steps to an adult's recovering from the effects of a stroke, from eating and exercising to shopping and working—in all these activities, psychological research has insights to offer. Applied psychologists have used research about learning to create more effective teaching materials. They have used research about attention to design appealing product labels. They have used research about motivation to help swimmers and runners stay with their training programs.

Careers in Psychology

Might you be interested in a career in psychology? The many different occupations involving psychology all require some training or certification beyond a college bachelor's degree.

You might choose to study the development of infants and children. Sports psychology, advertising psychology, working in industry or with organizations, even the psychology of humor—these are just a few of the specialties.

Some occupations, such as clinical psychology or counseling, require certification by a state or other government agency. In other fields of specialization, you can get your advanced training through hands-on experience.

Psychology in Your Life

You don't have to be a trained psychologist to use psychological principles to improve your life. Psychology can help you:

- * Understand and change what is happening in your social relationships.
- * Understand how you are influenced by your peers or the media.
- * Identify the causes of test anxiety or stress before they create problems for you.
- * Understand that you always have choices, that there are people who know how to help you and who want to help you. Knowing that every situation offers choices gives you powerful tools for dealing with life.

Psychology in the Past

Why Study the History of Psychology?

- * Many of today's approaches to psychology are built on a foundation of ideas from the past.
- * Knowing what worked and what didn't helps save time and energy while exploring new ideas.
- * Sometimes, ideas—good ideas—arise at a time when they either don't fit the thinking of the time or there is no easy way to explore them. The concepts of evolution and unconscious motivation are two such examples. When people revisit them later, old ideas may prove very useful.

Key Figures

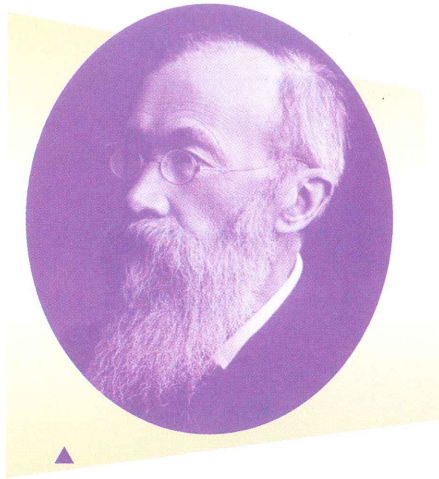
Modern psychology finds its roots in the thinking of the ancient Greek philosophers. Plato and Aristotle developed theories about learning. Later thinkers through the Renaissance and Enlightenment were interested in the mind and the body. With the rise of science and a methodical approach to the study of nature, scholars began using the scientific method to study the mind and behavior.

Psychology began in 1879 in Leipzig, Germany, when Wilhelm Wundt started the first laboratory for studying human thought. Wundt stated that he wanted to “mark out a new domain of science.” He succeeded and is sometimes called the “father of psychology.”

1. Wilhelm Wundt (1832–1920)

IDEAS: Wundt proposed that humans use their free will to focus their attention on particular aspects of a situation. He stated that attention and behavior have a purpose related to some kind of internal motivation. He used a method called introspection and conducted experiments on reaction time and attention. **Introspection** means looking inside oneself and describing what is going on. This approach is still used today, especially in clinical psychology.

After questioning many people about their sensations, perception, thoughts, and emotions, Wundt found very little agreement in what people experienced. He concluded that experiments could be used to study such things as perception and sensation but would not be as useful for studying higher processes.



Wilhelm Wundt believed people could use introspection to learn about themselves.

NAME OF APPROACH: Voluntarism. It emphasized free will, choice, and purpose.

MAJOR CONTRIBUTION: He demonstrated the idea that the mind and behavior can be studied scientifically. Many of Wundt’s students came to the United States and began their own laboratories using introspection, a forerunner to what we now call the scientific method.

2. William James (1842–1910)

IDEAS: James, along with John Dewey, was influential in founding American psychology. James wanted to understand how the mind functioned to help people adapt to the environment rather than just describe it. James was very aware of the differences among individuals and was interested in what made them different rather than similar.

NAME OF APPROACH: **Functionalism.** It focused on how the mind functions rather than on what the mind is. Later,

he developed **pragmatism**—the idea that if an idea works, it is valid or useful.

MAJOR CONTRIBUTION: James is best known for his emphasis on studying all aspects of an individual's experience, including behavior and individual differences.



▲ William James believed psychology should focus on the conscious mind of each individual.

Sigmund Freud believed early experiences were important for understanding behavior.



8 Introduction to Psychology

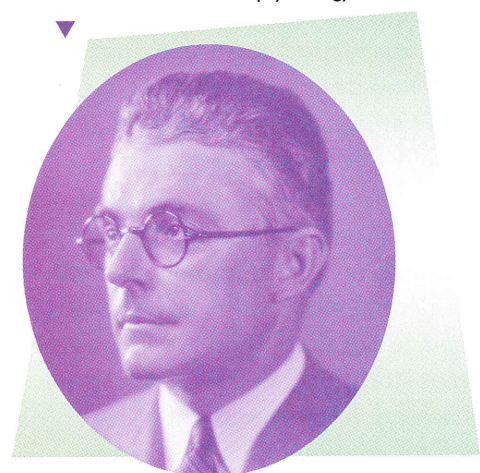
3. Sigmund Freud (1856–1939)

IDEAS: Unlike Wundt and James, who concentrated their efforts on the conscious mind, Sigmund Freud focused on how the unconscious mind affects the development of one's personality. Freud suggested that many of the things that occur in childhood shape our personality and account for later behaviors. He devised a way of treating patients with the method of free association, encouraging them to say whatever came into their minds. Freud also believed that dream analysis was an important psychological tool.

NAME OF APPROACH: **Psychoanalysis.** This method of treating mental illness analyzes information contained in the unconscious mind.

MAJOR CONTRIBUTION: Freud emphasized the importance of unconscious processes and the role of early experiences.

John B. Watson believed behavior, not the mind, should be the focus of psychology.



4. John B. Watson (1878–1958)

IDEAS: Watson believed that behavior was caused by some association that had previously been created in the brain. He didn't think that mental processes were appropriate subjects for psychology and believed that only behavior could be objectively and scientifically observed and measured. Watson focused on how we learn and how experience produces associations in the brain.

NAME OF APPROACH: Behaviorism.

This approach focused on the study of behavior rather than the mind and had the prediction and control of behavior as its goal.

MAJOR CONTRIBUTION: Watson developed learning theories that are still in use today.

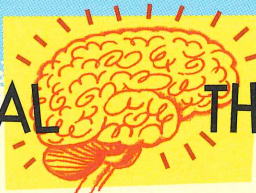
Sidebar



Physiology and Behavior

Who were the first people to realize that physiology might be useful in explaining behavior? You may be surprised to know they were actually astronomers. In 1795, two astronomers were using star observations to set the clocks on a ship. When a particular star crossed a hairline on the telescope, they would set the clock. One astronomer noticed that his assistant's observations were always about a half second slower than his own. He warned the assistant of the "error," but instead of improving, the assistant's observations were even farther off. Twenty years later, the astronomer Friedrich Bessel suggested that, rather than an error, there was actually a difference in the way two individuals made observations. In comparing his observations with those of others, Bessel did the first study on reaction time.





CRITICAL THINKING

Is Psychology a Science?

Science began as an attempt to understand nature. Many objects in nature behave in the same way under similar circumstances, but people often don't. Is psychology a science?

THE ISSUES

In the history of psychology, some important people, such as Galileo and Kant, have suggested that psychology can never be a science because it is concerned with subjective experience—that is, experience of the world as seen by a particular individual. Science, on the other hand, has prided itself on objective observations—that is, observations removed from any human interpretation or beliefs. In fact, science developed as a way of explaining nature without the use of religious belief, philosophical arguments, or superstition.

Scientists believe that by using the rules of logical and rational thought on **empirical** (based on experience) observations, they can draw conclusions about how nature behaves and make predictions about how it will behave in the future.

Those who argue against psychology as a science say that, first, psychology doesn't have a single theory under which it operates. Instead, psychology has many different approaches. In response to this charge, psychologists argue that scientists use both Newton's Laws and quantum theory to understand motion; psychology also has different ways to view a single topic.

Next, non-science proponents claim that psychology can't generate laws that apply to everyone as science does because individuals do not always respond in the same way to the same stimulus. Yet, psychologists—particularly those studying the role of the brain and body in behavior—have developed many theories and predictions about factors that can affect behavior.

Do you think that psychology is a science?

THE PROCESS

- 1 Restate the issues.** In your own words, state the nature of the disagreement.
- 2 Provide evidence.** From your own experience and from the information above, list the evidence *for* psychology's being called a science.
- 3 Give opposing arguments.** From your own experience and from the information above, list the evidence *against* psychology's being called a science.
- 4 Look for more information.** Make a list of questions you may have. Then search an

encyclopedia, the Internet, the library, or psychology books for answers.

- 5 Evaluate the information.** Make a chart with two columns:

Psychology as a Science	
For	Against

Record the arguments in each column and rank each column of arguments in importance from 1–5, with 1 as the most important.

- 6 Draw conclusions.** Write a paragraph supporting your answer to the question "Is psychology a science?"

Approaches to Psychology Today

Because the mind is so complex, there are many different approaches for studying it—different ways of interpreting and thinking about behavior. Here are **seven** of the major approaches to understanding the mind and behavior.

1 The Neurobiological Approach

The neurobiological approach studies the ways in which the brain, nervous system, and other body systems are involved in behavior. When a person exhibits a certain behavior, whether it's a change in breathing rate or a feeling of depression, neurobiologists want to know what changes are occurring in the body.

How is the body's chemistry changing, and how does that affect behavior? Where, in the body, are changes occurring? What do molecules have to do with emotion? Where is memory located in the brain?

Neurobiologists don't deny that other factors are important. They are simply most interested in how the physical systems affect behavior, thought, and feelings. For example, some medications for physical symptoms can also affect a person's mood or emotions.

2 The Behavioral Approach

Continuing in the tradition of Watson, the behavioral approach was carried forward by B. F. Skinner. Skinner claimed that studying anything other than observable behavior made psychology less of a science.

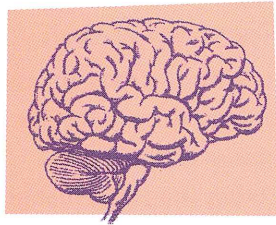
Skinner and other behaviorists insisted that we are the products of all of the different experiences to which we have been exposed in our lives. When we are rewarded or punished for a given behavior, we associate the behavior with the reward or punishment. This determines how we will use that behavior in the future. If the rewards we get from a behavior outweigh the punishment we may receive, we may choose to continue that behavior. Environment plays a key role.

Some people argue that behaviorist theory denies the idea of free will and, in a sense, makes us the "victims" of our environment. Many behaviorists have shifted their studies to focus more on how we learn and create associations.

3 The Psychodynamic Approach

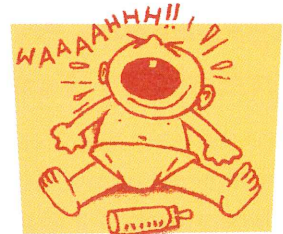
Freud's psychoanalysis emphasized the sexual and aggressive impulses that we experience in childhood and looked for ways in which they shaped the unconscious mind. The unconscious was then seen to influence behavior later in life.

The psychodynamic approach continues to focus on the inner forces, conflicts, or instincts of the unconscious that may affect



NEUROBIOLOGICAL APPROACH

Studies physical effects in the body and brain related to actions, feelings, and thoughts.



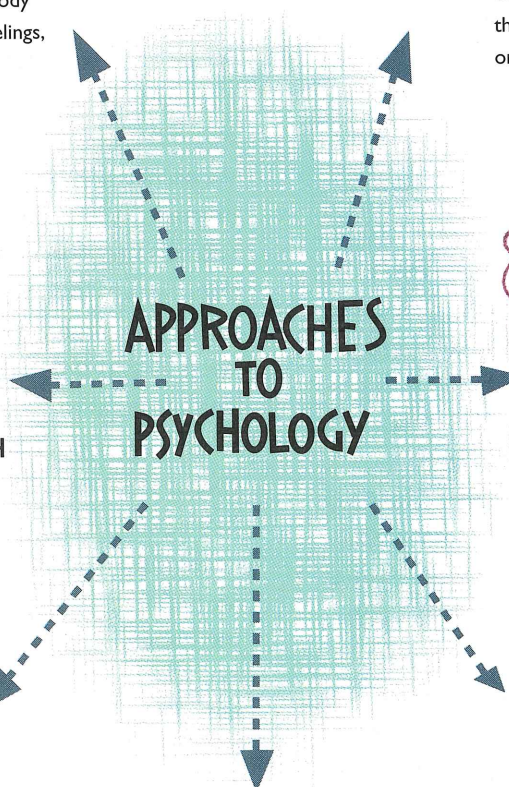
BEHAVIORAL APPROACH

Studies the behaviors of people, the effects of the environment on those behaviors, and learning.



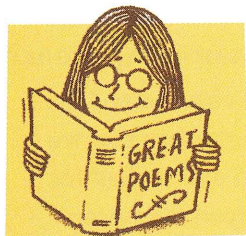
SOCIOCULTURAL APPROACH

Studies the social and cultural influences on behavior.



PSYCHODYNAMIC APPROACH

Focuses on the way unconscious forces, conflicts, or instincts influence behavior.



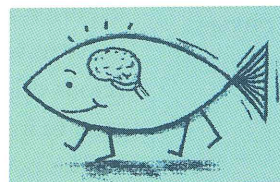
HUMANISTIC APPROACH

Emphasizes personal growth and the achievement of human potential.



COGNITIVE APPROACH

Studies mental processes of perception, memory, language, problem solving, and thinking.



EVOLUTIONARY APPROACH

Interested in the way the modules within the brain developed through adaptation to the environment.

behavior. But it no longer sees sexual and aggressive forces as the only influences on the unconscious.

Carl Jung, a friend of Freud, suggested that the unconscious is influenced by beliefs that we inherit—ideas that are part of every civilization. He called these beliefs the “collective unconscious.”

Karen Horney and Alfred Adler are two others who began in the Freudian school but resisted the heavy emphasis on biological and sexual needs. Horney proposed that social forces, such as the need for love, influence the unconscious. Adler emphasized the unconscious need of the individual to feel worthwhile and important.

4 The Cognitive Approach

Cognitive psychologists study “higher processes”—such as thinking, intelligence, problem solving, reasoning, and creativity. The cognitive approach is concerned with how these thinking processes can be used to deal with problems or to develop a healthy personality. For example, the idea of “positive affirmation”—telling yourself that you are a success or that you can do something—is a cognitive psychology technique.

Cognitive psychology has been criticized because its focus does not include emotion. Recent research strongly indicates that a person who has lost the ability to express emotion no longer exhibits what we call “rational” thought. Emotion seems to be necessary to set values on possible outcomes.

5 The Evolutionary Approach

The evolutionary approach to psychology is a combination of cognitive psychology and evolutionary biology. As Steven Pinker says in his book, *How the Mind Works*, “Cognitive science helps us to understand how a mind is possible and what kind of mind we have. Evolutionary biology helps us understand *why* we have the kind of mind we have.”

The major idea of evolutionary psychology is that the many modules of the mind are evolutionary adaptations arising through natural selection. In simple terms, if a particular behavior increased the chances of an organism’s survival, that organism tended to produce more offspring, and thus, more individuals with the same behavior. The ability to think, to reason, and to make logical choices was a useful set of behaviors, so they tended to be passed down.

Evolutionary psychologists don’t claim that all of our behaviors are necessarily adaptive, but they have identified many that they can explain in those terms.

6 The Humanistic Approach

The humanistic approach asserts that we all have within us the potential to become fulfilled and effective people. Just as an acorn contains everything it needs to become a giant oak tree, so we have within us the resources to become fully human.

Of course, the environment plays a role in the development of both the tree and the individual. But unlike the behaviorists,

humanists believe that consciousness, self-awareness, and free will allow us to shape our lives as we see fit. Personal experience is an important focus of humanistic study.

Carl Rogers is one of the best known humanistic psychologists. He helped develop what is known as client-centered therapy. It encourages people to identify the resources within themselves that can help them solve their problems.

7 The Sociocultural Approach

All of the approaches mentioned so far have tended to study how individuals function. The sociocultural approach is concerned with how individual behavior is influenced by the social groups we belong to or by the culture in which we live.

For example, the expectations of a person born and raised in a rural area may be different from those of a child raised in a large city. In addition, both may be affected by the culture of the country in which they live and the religion of their families.

Sociocultural psychologists study families, ethnic groups, religious groups, and unique populations, such as prisoners, migrants, or people with alternative lifestyles. The experiences, motivations, and emotions of groups such as feminists, gays and lesbians, and homeless people are other examples of studies that a sociocultural psychologist might undertake.

Psychology Across Cultures

Developmental Psychology

1. How are children raised and by whom?
2. At what age is one considered a working member of the culture?
3. What is the role of women in the culture?
4. What is the role of the elderly in the culture?
5. How do languages differ?



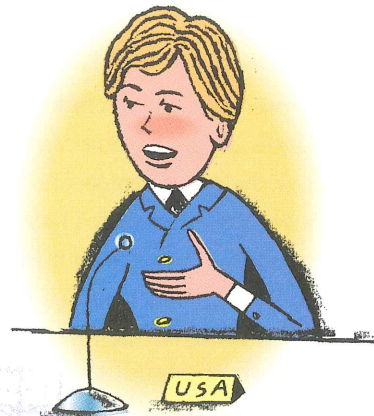
Beliefs

1. What do people believe about their relationship to nature?
2. How do beliefs affect the sense of right and wrong?
3. How do beliefs affect the political system of a culture?
4. What role do religious beliefs play in everyday life?
5. Is there a class structure related to beliefs?

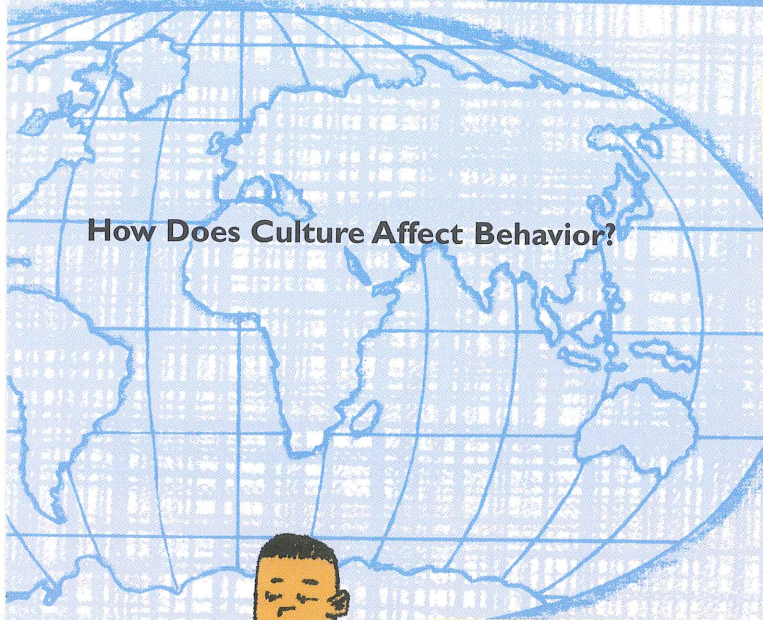


Personality

1. How do people of different cultures express emotion?
2. What is the attitude about work and responsibility?
3. Are people generally extroverted or introverted?
4. How does the culture express creativity?
5. How much "personal space" does a person require?

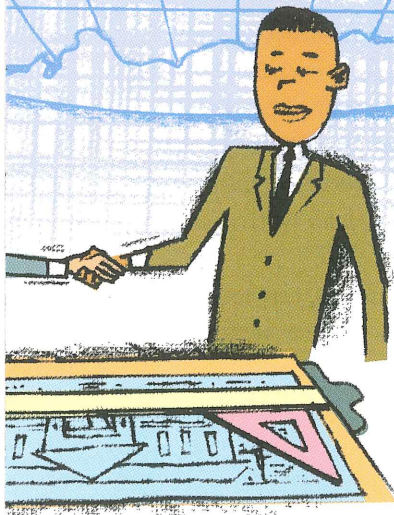


How Does Culture Affect Behavior?



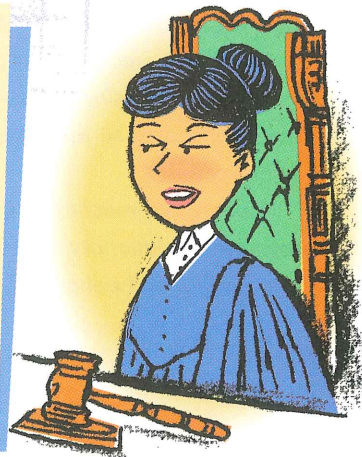
Education/Learning

1. What expectations do people have about education?
2. Are standardized tests culturally biased?
3. How do learning styles differ among cultures?
4. Do people of different cultures exhibit different cognitive processes?
5. What are the effects of being bilingual on learning?



Applied Psychology

1. How can people of different cultures work together in business?
2. Does the same advertising work with different cultures?
3. Is a given behavior considered normal in one culture and abnormal in another?
4. How can a person be integrated into a new culture?
5. Can psychologists work in the same way with people of different cultures?



What About the Future?

Approaches to psychology are limited only by the questions one can think to ask about how the mind works and why we behave as we do. As society changes, the questions change with them, so it is unlikely that we'll soon have a full picture of what humans are about.

Even the definition of *mind* is open to question. Before psychology was recognized as a science, philosopher René Descartes proposed that the mind and the body were separate and played different roles in behavior. Today, that division is much less clear. Although scientists and psychologists don't all agree on what the mind is, many now say that the mind is

what the brain does. Newer scientific approaches realize that we must consider the interactions among the entire system of brain, mind, body, and environment in order to understand some of the more complex human behaviors.

It's interesting that the father of modern experimental psychology, Wilhelm Wundt, realized much the same thing after studying the experiences of many different people. Wundt concluded in 1896 that the actual character of a specific mental process depends, for the most part, not on the nature of the parts as much as on the way they combine. Now, more than 100 years later, psychology is, to some extent, returning to its foundations.

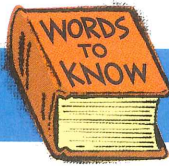
Chapter 1 Wrap-up

THE WORLD OF PSYCHOLOGY

Psychology is the study of the mind and behavior. Psychologists conduct research, promote physical and mental health, help people learn, work in the community, and contribute to the work environment. The two main types of psychology are research and applied psychology.

Psychology was first recognized as a science when, in 1879, Wilhelm Wundt started the first laboratory using the scientific method to study humans. Other nineteenth-century figures who contributed to the development of psychology were William James, John Watson, and Sigmund Freud.

Modern approaches to psychology include the neurobiological, behavioral, psychodynamic, cognitive, evolutionary, humanistic, and sociocultural approaches. Each explores some aspect of the mind and behavior, but from a different perspective.



behavior—every measurable internal and external activity a living thing does. *p. 2*

empirical—relating to facts or experiences in general. *p. 10*

functionalism—psychological approach that focuses on what the mind does rather than what it is. *p. 7*

introspection—research method in which individuals look inside themselves and report on their conscious mental processes. *p. 7*

pragmatism—approach based on the assumption that if an idea works, it is valid. *p. 8*

psychoanalysis—theory of personality and method of treating mental illness that emphasizes unconscious motives and conflicts. *p. 8*

psychology—study of mental processes and behavior and how they are affected by a person's physical states, mental states, and the external environment. *p. 2*