

# History and Approaches

**Psychology** is the scientific study of the behavior and mental processes of human and nonhuman animals. **Behavior** is defined as any action that may be observed and measured, and **mental processes** include cognitions, sensations, perceptions, and emotions. As a science, psychology seeks to use empirical methods to observe, measure, predict, explain, and positively influence behavior. Some psychologists focus on the biology of behavior and mental processes, such as the influences of nerve cells, genetics, or hormones. Other psychologists study complex social behaviors, such as aggression, attraction, and prejudice. There are many varied approaches to the study of psychology, making it a rich and complex field.

## Early Influences on Psychology

Since the beginning of thought, humans have asked psychological questions, such as: How do we experience the world around us? What is the relationship between the way that we experience the world and how our bodies function; for example, why does food lose its flavor when we are sick? How do we learn, and what accounts for differences in behavior and temperament among people?

### Greek Philosophy

The science of psychology, like physics, chemistry, and biology, developed from philosophy. Historians trace psychology's beginnings to the philosophers of ancient Greece. Ancient Greek philosophers observed and interpreted their environment and organized their findings, forming the basis for empirical investigation in psychology. These philosophers were the first Europeans to reason that human beings have, in addition to a physical body, an apparatus used for thinking. Philosophers called this thinking apparatus the *psyche* or *mind*. The term *psychology* means literally "the study of the mind" and results from the combination of the Greek root words *psyche* or mind and *logos*, meaning "the study of." Ancient Greek philosophers were the first to debate whether the mind could exist separately from the body in what is referred to as the *mind-body*

*problem*. In what is known as **dualism**, Socrates and his student Plato both believed that the body and the mind were separate and that only the mind survived after death. However, Aristotle suggested that the mind could not be separated from the body, because mind and body were different aspects of the same thing; this is known as **monism**. Greek philosophers also questioned whether thought and behavior were innate or learned through experiences in what is known today as the *nature versus nurture debate*. Socrates and Plato believed that ideas were innate, thus supporting the nature half of the debate. Aristotle asserted that ideas resulted from experience, placing him on the nurture side of the nature versus nurture debate regarding the causes of human behavior. The debate regarding the relative influences of nature and nurture on behavior continues today.

## Scientific Revolution

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While Greek philosophers examined many of the ideas of modern psychological science, they did so only through the application of thinking and reasoning and without the use of empirical methods. It would be two thousand years before psychological concepts would be examined scientifically. The French philosopher **René Descartes** (1596–1650) was very interested in extending the “mind-body” problem that began with the monism–dualism debate of the ancient Greeks. He firmly believed in dualism and hypothesized that the mind and body communicated through nerves. Descartes reasoned that some ideas were innate and others were derived from experience. Because Descartes combined philosophy and physiology, this is considered an important step in the birth of psychology as a science. **John Locke** (1632–1704), a British philosopher, agreed with Aristotle that ideas were not innate and presented the idea of the mind as a blank slate or **tabula rasa** at birth. This view of a blank slate places Locke on the nurture side of the nature versus nurture debate regarding the causes of human behavior. Locke’s view that knowledge should be gained through careful observation and from experimental evidence is known as **empiricism**.

## STUDY TIP

Be able to answer questions about the disciplines that led to the creation of psychology. Although modern psychological science has a short history, it has roots in *philosophy* and *physiology* that extend deep into the past.

## Historical Perspectives of Scientific Psychology

### Birth of Psychology as a Science

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Psychological science as a formal discipline began in 1879 with the establishment of the first laboratory devoted entirely to the scientific investigation of psychological phenomena. Since the birth of scientific psychology, the field has evolved, resulting in a variety of historical and contemporary perspectives for explaining behavior and mental processes.

In 1879, physiologist **Wilhelm Wundt** (1832–1920), considered to be the father of psychology, established the first laboratory solely devoted to the scientific study of psychology in Leipzig, Germany. Wundt studied the complex concept of consciousness by dividing the mind into component elements in a perspective later known as *structuralism*. To analyze the mental elements, Wundt used an experimental method called **introspection** that involved having subjects report the contents of their own mind as objectively as possible, usually in relation to stimuli such as light, sound, or odors. The subjects were trained to give elaborate verbal reports that were then analyzed to determine the mental elements the subjects were experiencing.

**G. Stanley Hall** (1846–1924), who studied for a short time with Wundt in Germany, was influential in the rapid growth of psychology in the United States. Hall opened the first psychology lab in the United States and started the first American psychology journal. Additionally, he helped found the influential American Psychological Association (APA) and served as its first president.

### Early Perspectives

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Wundt's student, **Edward Titchener**, created the first theoretical perspective in psychology, structuralism, based on Wundt's work. Titchener brought psychology to the United States by starting his own psychology research lab at Cornell University. **Structuralism** concentrated on examining consciousness by breaking it down into its basic components or *structures*, including sensations, images, and feelings. Titchener and Wundt both utilized introspection to have subjects describe their sensations.

The major drawback of structuralism was that it was dependent on the subjective and unreliable process of introspection. The subjective reports of the mind's activities generated by introspection are vulnerable to manipulation by both the subject and the experimenter.

Psychologists today are still concerned with mental activities, but are primarily interested in how these activities influence behavior.

**William James** (1842–1910), an American psychologist, founded the perspective of functionalism and published the first textbook of psychology, *The Principles of Psychology*. Whereas structuralists were concerned with what the mind was made up of (structures), functionalists examined the evolved purposes (functions) of the elements of consciousness. **Functionalism** is a theoretical perspective inspired by Charles Darwin's theory of natural selection; it focused on discovering the evolved functions of behavior and mental processes that help organisms adapt to a changing environment. William James coined the phrase *stream of consciousness* to describe the way the mind experiences perception and thought as a constant flow of sensation. The largest contribution of functionalism to modern psychology was the addition of research on behaviors, including learning and adaptation to environment. Functionalists were interested in discovering real-world applications for psychology and would influence the development of both applied psychology and behaviorism.

## STUDY TIP

Structuralism focuses on the “*what*” of consciousness, while functionalism focuses on the purposes or the “*why*” of consciousness.

**Gestalt psychology**, like structuralism and functionalism, involved research on consciousness, most frequently on the areas of perception, learning, and problem solving. The word *gestalt* refers to form, or organization, and Gestalt psychologists emphasized the organizational processes, rather than the content of behavior. Gestalt psychology emphasizes the idea that the whole is greater than the sum of its parts. Current cognitive psychologists draw heavily on Gestalt ideas, particularly in relation to questions of vision and information processing.

## STUDY TIP

For the Gestalt theory *the whole is greater than the sum of its parts*. For example, when viewing a piece of furniture, a person perceives it as a desk as opposed to a table with four legs.

## American Women in Psychology

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Although there were considerable obstacles, women played an important role in the development of psychology as a science in the United States. **Mary Whiton Calkins** (1863–1930), a student of William James, developed an important technique for studying memory. Despite being denied the Ph.D. she earned from Harvard because of her gender, Mary Whiton Calkins became the first female president of the American Psychological Association. **Margaret Floy Washburn** (1871–1939), the first woman to formally earn a Ph.D. in psychology, under Edward Titchener, did significant research on animal behavior and greatly influenced the emerging perspective of behaviorism.

## Contemporary Perspectives of Psychology

The early perspectives of structuralism and functionalism paved the way for the seven contemporary perspectives we currently use today. Psychologists have developed multiple methods to understand the causes of human behavior. These perspectives are also known as *schools of thought* or *approaches*.

### Psychoanalytic/Psychodynamic Perspective

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The **psychoanalytic perspective** developed by **Sigmund Freud** (1856–1939) explains that emotional problems and abnormal behavior are the result of unresolved unconscious conflicts. Freud emphasized the impact of early childhood experiences and unconscious sexual and aggressive instincts on behavior. Freud's primary tool for investigation was the case study; he compiled detailed information about patients consisting of both his commentary and the patient's autobiographical material. In order to help his patients, Freud sought out methods to reach the unconscious mind, including dream analysis and free association. Freud believed that individuals needed to be made aware of the problems in their unconscious in order to be able to resolve their issues and become healthy. He developed a comprehensive theory of consciousness, developed techniques that helped many

#### **DID YOU KNOW?**

When Hitler annexed Austria to the Reich in March 1938, Sigmund Freud, a Jew, was considered an enemy of the new Germany. The 82-year-old Freud relocated to London. In 1939, he unsuccessfully tried to obtain visas for his four younger sisters—Dolfi, Mitzi, Rosa and Pauli—who remained in Vienna. Dolfi died of starvation in a Theresienstadt concentration camp. The other three were murdered in the death camps.

patients with their problems, and is credited with the invention of the “talking cure.” Freud and his theories have received considerable criticism for being nonscientific, but his influence is undeniable. This continuing influence is apparent in the modern psychodynamic perspective that also focuses on the unconscious and how early childhood experiences influence behavior.

## Behaviorist Perspective

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The perspective of behaviorism developed in the United States as a response to and criticism of the structuralist and psychoanalytic perspectives prevalent at the time. The **behaviorist perspective** stressed that psychology should involve only the study of behaviors that could be both observed and measured. Psychology according to behaviorists should not study mental processes and consciousness, which was the focus of the dominant perspectives in psychology at that time. Behaviorism was inspired by the work of Nobel Prize-winning physiologist **Ivan Pavlov** (1849–1936) whose research found behaviors were learned through association, leading to the discovery of classical conditioning. The founder of **behaviorism** was **John B. Watson** (1878–1958), who criticized the investigation of consciousness as something that could not be studied objectively and who even denied the existence of the unconscious mind. Watson rejected introspection and believed that psychology should study only observable, measurable behaviors that were the product of stimuli (events in one’s environment). Watson’s research focused on how classical conditioning worked in humans, especially the development of classically conditioned fears, with his famous study involving “Little Albert.” Another major contributor to the field of behaviorism was **B.F. Skinner** (1904–1990) whose work on operant conditioning involved demonstrating how organisms learn voluntary responses. Skinner stressed that reinforcements and punishments influenced future behavior and that free will was an illusion. Behaviorism remains a significant area of study in modern psychology. Behaviorism’s emphasis on precise experimentation has been found to have numerous practical applications, including **behavior modification** or the application of learning theory to the control of human behavior.

## Humanist Perspective

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The **humanist perspective** arose in the 1950s, with a completely different focus than earlier perspectives. According to humanist psychologists, behaviorism concentrated on scientific fact, to the exclusion of human experience, and psychoanalysis concentrated too much on human shortcomings. Humanist psychologists chose to study healthy, creative people rather than mental illness. The two most influential humanist psychologists were

Abraham Maslow and Carl Rogers. **Abraham Maslow** suggested that human beings were basically good and motivated to achieve self-actualization, but that their basic needs had to be met first. **Carl Rogers** also stressed that people are constantly striving to develop to their fullest potential, but that some are prevented from achieving this due to factors in their environment. Humanists, in contrast to behaviorists, emphasized the concept of free will driving individuals to take control of their choices and strive to achieve full human potential.

## Cognitive Perspective

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Interest in the mind was revived in the 1950s as psychologists realized that behaviorism, while a useful approach, had taught them nothing about mental processes. In contrast to behaviorists, cognitive psychologists discuss the influence of mental processes in determining how humans perceive, understand, communicate, and behave. The **cognitive perspective** is concerned with the processes of thinking and memory, as well as attention, imagery, creativity, problem solving, and language. The cognitive revolution was made possible by technological advances that gave psychologists the power to explore realms that were previously considered too subjective by the dominant behaviorists of the time. Cognitive psychologists began to use computers to simulate human memory, language use, and visual perception.

## Biological Perspective

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The **biological perspective** focuses on explaining human behaviors, emotions, and mental processes as having physiological causes. Biological psychology covers a wide range of study, including genetics, the nervous system, and the endocrine system. Research in the area of biological psychology may involve dissecting the brain of a human or animal who suffered a behavior disorder, experimenting with drug treatments for mental illness, measuring brain waves during sleep, or investigating the effects of biological factors on eating, aggression, mental illness, or learning. Increasingly, biological research involves the use of brain imaging to determine areas of the brain involved when a person is engaged in a particular behavior or thought.

## STUDY TIP

Students often confuse the terms *brain* and *mind*, and consequently the biological and cognitive perspectives. The term *brain* refers to a specific organ in the body, and the term *mind* refers to what the brain does. The biological perspective deals with the brain, and the cognitive perspective focuses on the mind.

## Evolutionary Perspective

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The **evolutionary perspective** explains social behaviors and mental processes as the product of human adaptation to the environment during the course of evolution. According to **Charles Darwin's** theory of **natural selection**, traits and behaviors exist in humans because these attributes allowed our ancestors to adapt, survive, and reproduce. For instance, evolutionary psychology would explain that aggression is common in humans today because, over thousands of generations, those who were genetically predisposed to defend their territories would have been more successful at producing children than those who did not have the needed traits. Darwin's theories had an enormous impact on the development of psychology and continue to influence the field today.

### STUDY TIP

Students often confuse the biological and evolutionary perspectives because they both involve genetics. The key difference is that the evolutionary perspective explains behavior as being the result of gradual changes over extremely long time periods, allowing for species-level survival. The biological perspective explains that an individual's behavior is influenced by the inheritance of specific genes (genetic predisposition) from their biological parents.

## Socio-Cultural Perspective

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The goal of the **socio-cultural perspective** is to investigate the contribution of diversity and culture to human behavior and mental processes. This perspective emphasizes the impact on behavior of various aspects of individuals' identity and culture such as economic status, ethnicity, age, and gender not previously examined in psychological research.

### STUDY TIP

Although the contemporary (modern) theoretical perspectives do not make up a large portion of the exam (2–4 percent), a strong understanding of the various ways psychology explains behavior and mental processes will help you answer questions throughout the AP Psychology Exam.



Modern psychology relies on a variety of theoretical perspectives for explaining human behavior. Each perspective has strengths and weaknesses, and, rather than competing with each other, modern psychology utilizes the approach that is most appropriate for explaining a given situation. Be prepared to examine how each of the seven contemporary perspectives would explain a particular behavior. The following example of test anxiety can be explained according to each perspective.

Table 3.1. Applications of the Seven Contemporary Perspectives

Perspective	Behavior of Test Anxiety
Psychoanalytic/Psychodynamic	Test anxiety serves as a release for unconscious aggression.
Behavioral/Learning	An individual may have learned the behavior of test anxiety by observing siblings who also experienced nervousness in testing situations or through reinforcements and punishments.
Humanistic	Test anxiety results when esteem needs are not met and individuals do not have confidence in their ability to be successful. Test anxiety occurs because individuals are blocked from achieving their goals and becoming the best that they can be.
Cognitive	Negative thoughts about failure result in test anxiety.
Biological/Neurological	Lower levels of the neurotransmitter GABA make an individual more prone to anxiety.
Evolutionary	Anxious behavior leads to human survival because it increases caution and helps individuals to avoid dangerous situations.
Socio-Cultural	Individuals from cultures that value success in school and achievement are more likely to experience test anxiety.

## Careers in Psychology

Psychologists work in both practitioner and research capacities and are employed by universities, schools, industries, and governments, and in private practice. As practitioners, psychologists assess individuals through interviews and testing and provide therapy to help cope with stress, adjustment issues, and mental illness. Experimental psychologists conduct experiments in a variety of specialties or subfields consisting of both basic and applied research. **Basic research** involves attempting to answer scientific questions and expand the overall information base of psychology. **Applied research** involves utilizing psychological knowledge to solve real-world problems. The table below provides a description of the main specialties found in psychology.

## STUDY TIP

Students often confuse a clinical psychologist with a psychiatrist. Both are concerned with the diagnosis and treatment of psychological problems and disorders. However, a **psychiatrist** has a medical degree and is licensed to prescribe medication or drug treatments.

Table 3.2. Careers in Psychology

Specialty	Description
Biological/Neuroscience	Investigates the relationship among the body, brain, and nervous system, and behavior and mental processes.
Clinical	Works with the diagnosis, causes, and treatment of mental disorders.
Cognitive	Examines how mental processes, such as thinking, knowing, feeling, and memory operate and affect behavior.
Counseling	Works with people coping with everyday problems, including career decisions, marriage counseling, and social skills training.
Developmental	Studies how people change over time and the developmental stages across the human lifespan.
Educational	Studies theoretical issues related to how people learn and effective teaching practices.
Human Factors	Uses psychological knowledge to increase efficiency between humans and machines.
Industrial/Organizational	Concerned with psychological issues related to the work environment; employee motivation and selection.
Personality	Examines our stable traits and factors that influence temperament. Develops methods of personality assessment.
Psychometrics	Concerned with mathematical or numerical methods of measuring psychological variables by creating valid and reliable tests.
School	Works directly with students who exhibit emotional or learning problems to overcome educational difficulties in a K–12 setting. Creates and implements plans to meet individualized student needs.
Social	Studies the impact of society on individuals and how a person's life and behavior are shaped by interactions with others.