

## What is Psychology?

*What eyes can't see lies within the mind*

Psyche, in Greek mythology, was a mortal woman whose beauty was so great that it rivaled that of the goddess Aphrodite. Aphrodite became so jealous of Psyche that she sent her son, Eros, to make Psyche fall in love with the ugliest man in the world. However, Eros accidentally pricked himself with the tip of his arrow and fell madly in love with Psyche himself. He took Psyche to his palace and showered her with gifts, yet she could never see his face. While visiting Psyche, her sisters roused suspicion in Psyche about her mysterious lover, and eventually, Psyche betrayed Eros' wishes to remain unseen to her.

Because of this betrayal, Eros abandoned Psyche. When Psyche appealed to Aphrodite to reunite her with Eros, Aphrodite gave her a series of impossible tasks to complete. Psyche managed to complete all of these trials; ultimately, her perseverance paid off as she was reunited with Eros and was ultimately transformed into a goddess herself. Psyche comes to represent the human soul's triumph over the misfortunes of life in the pursuit of true happiness. In fact, the Greek word psyche means soul, and it is often represented as a butterfly.

Psychology is a relatively young science with its experimental roots in the 19th century, compared, for example, to human physiology, which dates much earlier. Anyone interested in exploring issues related to the mind generally did so in a philosophical context prior to the 19th century. Two men, working in the 19th century, are generally credited as being the founders of psychology as a science and academic discipline that was distinct from philosophy. Their names were Wilhelm Wundt and William James.

### A. True or False

1. In ancient mythology, Psyche was originally incarnated as a goddess with beauty akin to that of Aphrodite. **F**
2. Eros fell accidentally in love with Psyche despite his mother's wishes. **T**
3. Psyche's union with Eros was safe on the precondition that he remained unseen to her. **T**
4. Psychology, as a philosophical field of study focusing on mental health issues, was launched prior to the study of physiology, in the 19<sup>th</sup> century. **F**

### B. Check if you know the following words

mortal (adj.)	transform (v.)	experimental (adj.)
rival (v./n.)	misfortune (n.)	founder (n.)
betray (v.)>betrayal(n.)	in the pursuit of (n.)	credit (v./n.)
appeal (v.)	prior to (conj.)	
perseverance (n.)	discipline (n.)	

## 1. Wundt and Structuralism?

Wilhelm Wundt (1832–1920) was a German scientist who was the first person to be referred to as a psychologist. His famous book entitled *Principles of Physiological Psychology* was published in 1873. Wundt viewed psychology as a scientific study of conscious experience, and he believed that the goal of psychology was to identify components of consciousness and how those components combined to result in our conscious experience. Wundt used introspection (he called it “internal perception”), a process by which someone examines their own conscious experience as objectively as possible, making the human mind like any other aspect of nature that a scientist observed. Wundt’s version of introspection used only very specific experimental conditions in which an external stimulus was designed to produce a scientifically observable (repeatable) experience of the mind.

The first stringent requirement was the use of “trained” or practiced observers, who could immediately observe and report a reaction. The second requirement was the use of repeatable stimuli that always produced the same experience in the subject and allowed the subject to expect and thus be fully attentive to the inner reaction. These experimental requirements were put in place to eliminate “interpretation” in the reporting of internal experiences and to counter the argument that there is no way to know that an individual is observing their mind or consciousness accurately, since it cannot be seen by any other person. This attempt to understand the structure or characteristics of the mind was known as structuralism.

Wundt established his psychology laboratory at the University at Leipzig in 1879. In this laboratory, Wundt and his students conducted experiments on, for example, reaction times. A subject, sometimes in a room isolated from the scientist, would receive a stimulus such as a light, image, or sound. The subject’s reaction to the stimulus would be to push a button, and an apparatus would record the time to reaction. Wundt could measure reaction time to one-thousandth of a second. However, despite his efforts to train individuals in the process of introspection, this process remained highly subjective, and there was very little agreement between individuals. As a result, structuralism fell out of favor with the passing of Wundt’s student, Edward Titchener, in 1927.

### A. True or False

1. Wundt examined the constituent parts of consciousness that led to living experiences. **T**
2. To do that, he used the technique of introspection treating the human mind as an object of observation. **T**
3. One of the requirements to conduct introspection was the use of amateur observers. **F**
4. The requirements set for introspection were to safeguard that mind could not be empirically studied. **F**
5. Reaction time experiments were used as direct measures by structuralists. **T**

### B. Check if you know the following words

consciousness (n.)	interpretation (n.)
introspection (n.)	counter (v.)
perception (n.)	structuralism (n.)
stimulus (n.)>stimuli	apparatus (n.)
stringent (adj.)	
eliminate (v.)	

## 2. James and Functionalism

William James (1842–1910) was the first American psychologist who espoused a different perspective on how psychology should operate. James was introduced to Darwin's theory of evolution by natural selection and accepted it as an explanation of an organism's characteristics. Key to that theory is the idea that natural selection leads to organisms that are adapted to their environment, including their behavior. Adaptation means that a trait of an organism has a function for the survival and reproduction of the individual, because it has been naturally selected. As James saw it, psychology's purpose was to study the function of behavior in the world, and as such, his perspective was known as functionalism.

Functionalism focused on how mental activities helped an organism fit into its environment. Functionalism has a second, more subtle meaning in that functionalists were more interested in the operation of the whole mind rather than of its individual parts, which were the focus of structuralism. Like Wundt, James believed that introspection could serve as one means by which someone might study mental activities, but James also relied on more objective measures, including the use of various recording devices, and examinations of concrete products of mental activities and of anatomy and physiology.

### A. True or False

1. Based on Darwin's theory of natural selection, some organisms are destined to survive by adapting to existing external circumstances while other don't. **T**
2. James was more interested in studying how behaviour was conditioned by the way we think. **T**
3. Like Wundt, James used introspection as one of the most objective means of measurement. **F**

### B. Check if you know the following words

espouse (v.)	reproduction (n.)
perspective (n.)	subtle (adj.)
evolution (n.)>evolve (v.)	rely on (v.)
adapt (v.)>adaptation (n.)	device (n.)
survival (n.)	concrete (adj.)

### 3. Freud and Psychoanalytic Theory

Perhaps one of the most influential and well-known figures in psychology's history was Sigmund Freud. Freud (1856–1939) was an Austrian neurologist who was fascinated by patients suffering from “hysteria” and neurosis. Hysteria was an ancient diagnosis for disorders, primarily of women with a wide variety of symptoms, including physical symptoms and emotional disturbances, none of which had an apparent physical cause. Freud theorized that many of his patients' problems arose from the unconscious mind.

In Freud's view, the unconscious mind was a repository of feelings and urges of which we have no awareness. Gaining access to the unconscious, then, was crucial to the successful resolution of the patient's problems. According to Freud, the unconscious mind could be accessed through dream analysis, by examinations of the first words that came to people's minds, and through seemingly innocent slips of the tongue. Psychoanalytic theory focuses on the role of a person's unconscious, as well as early childhood experiences, and this particular perspective dominated clinical psychology for several decades.

Freud's ideas were influential, and you will learn more about them when you study lifespan development, personality, and therapy. For instance, many therapists believe strongly in the unconscious and the impact of early childhood experiences on the rest of a person's life. The method of psychoanalysis, which involves the patient talking about their experiences and selves, while not invented by Freud, was certainly popularized by him and is still used today.

Many of Freud's other ideas, however, are controversial. Drew Westen (1998) argues that many of the criticisms of Freud's ideas are misplaced, in that they attack his older ideas without taking into account later writings. Westen also argues that critics fail to consider the success of the broad ideas that Freud introduced or developed, such as the importance of childhood experiences in adult motivations, the role of unconscious versus conscious motivations in driving our behavior, the fact that motivations can cause conflicts that affect behavior, the effects of mental representations of ourselves and others in guiding our interactions, and the development of personality over time. Westen identifies subsequent research support for all of these ideas.

More modern iterations of Freud's clinical approach have been empirically demonstrated to be effective. Some current practices in psychotherapy involve examining unconscious aspects of the self and relationships, often through the relationship between the therapist and the client. Freud's historical significance and contributions to clinical practice merit his inclusion in a discussion of the historical movements within psychology.

#### A. True or False

1. Freud was attracted by the study of hysteria and neurosis as they were disorders with no apparent cause. **T**
2. The unconscious mind was thought to be the residence of dreams. **F**
3. Psychoanalytic theory analyzes early childhood experiences that reveal a lot about the problems that arise in later life. **T**
4. Psychoanalysis helps us understand the motives that trigger people behaviour under given circumstances. **T**
5. Freud's work remained to critic and unanimously acknowledged by everyone in the field. **F**

#### B. Check if you know the following words

influential (adj.)	awareness (n.)	lifespan (n.)
disorder (n.)	resolution (n.)	impact (n.)
disturbance (n.)	seemingly (adv.)	controversial (adj.)
repository (n.)	slips of the tongue	misplace (v.)
urge (n.)	dominate (v.)	conflict (n.)
		interaction (n.)
		Iteration (n.)
		merit (v./n.)

#### 4. Wertheimer, Koffka, Kohler & Gestalt Psychology

Max Wertheimer (1880–1943), Kurt Koffka (1886–1941), and Wolfgang Köhler (1887–1967) were three German psychologists who immigrated to the United States in the early 20th century to escape Nazi Germany. These men are credited with introducing psychologists in the United States to various Gestalt principles. The word Gestalt roughly translates to “whole;” a major emphasis of Gestalt psychology deals with the fact that although a sensory experience can be broken down into individual parts, how those parts relate to each other as a whole is often what the individual responds to in perception. For example, a song may be made up of individual notes played by different instruments, but the real nature of the song is perceived in the combinations of these notes as they form the melody, rhythm, and harmony. In many ways, this particular perspective would have directly contradicted Wundt’s ideas of structuralism.

Unfortunately, in moving to the United States, these men were forced to abandon much of their work and were unable to continue to conduct research on a large scale. These factors along with the rise of behaviorism in the United States prevented principles of Gestalt psychology from being as influential in the United States as they had been in their native Germany. Despite these issues, several Gestalt principles are still very influential today. Considering the human individual as a whole rather than as a sum of individually measured parts became an important foundation in humanistic theory late in the century. The ideas of Gestalt have continued to influence research on sensation and perception.

Structuralism, Freud, and the Gestalt psychologists were all concerned in one way or another with describing and understanding inner experience. But other researchers had concerns that inner experience could be a legitimate subject of scientific inquiry and chose instead to exclusively study behavior, the objectively observable outcome of mental processes

##### A. True or False

1. Gestalt psychology gives emphasis to the person as a whole entity. **T**
2. Gestalt psychology was as popular in the U.S. as it originally was in Germany. **F**
3. The idea of an individual as an autonomous personality was a central tenet of behaviorism **F**

##### B. Check if you know the following words

immigrate (v.)	abandon (v.)	legitimate (adj.)
roughly (adv.)	prevent (v.)	inner (adj.)
perception (n.)	principle (n.)	inquiry (n.)
contradict (v.)	humanistic (adj.)	
	foundation (n.)	

## 5. Pavlov, Watson, Skinner & Behaviorism

Early work in the field of behavior was conducted by the Russian physiologist Ivan Pavlov (1849–1936). Pavlov studied a form of learning behavior called a conditioned reflex, in which an animal or human produced a reflex (unconscious) response to a stimulus and, over time, was conditioned to produce the response to a different stimulus that the experimenter associated with the original stimulus. The reflex Pavlov worked with was salivation in response to the presence of food. The salivation reflex could be elicited using a second stimulus, such as a specific sound, that was presented in association with the initial food stimulus several times. Once the response to the second stimulus was “learned,” the food stimulus could be omitted. Pavlov’s “classical conditioning” is only one form of learning behavior studied by behaviorists.

John B. Watson (1878–1958) was an influential American psychologist whose most famous work occurred during the early 20th century at Johns Hopkins University. While Wundt and James were concerned with understanding conscious experience, Watson thought that the study of consciousness was flawed. Because he believed that objective analysis of the mind was impossible, Watson preferred to focus directly on observable behavior and try to bring that behavior under control. Watson was a major proponent of shifting the focus of psychology from the mind to behavior, and this approach of observing and controlling behavior came to be known as behaviorism.

A major object of study by behaviorists was learned behavior and its interaction with inborn qualities of the organism. Behaviorism commonly used animals in experiments under the assumption that what was learned using animal models could, to some degree, be applied to human behavior. Indeed, Tolman (1938) stated, “I believe that everything important in psychology (except ... such matters as involve society and words) can be investigated in essence through the continued experimental and theoretical analysis of the determiners of rat behavior at a choice-point in a maze.”

### A. True or False

1. Pavlov’s classical conditioning learning theory was based on the reflex-stimulus association. **T**
2. His observations initially involved saliva secretion in animals. **T**
3. Watson believed that innate abilities can be examined via observable behavior. **T**
4. According to behaviorisms, animals and humans display the same behavior patterns. **T**
5. Behaviorism was not a particularly influential psychology research paradigm. **F**

### B. Check if you know the following words

conditioned reflex (n.)	omit (v.)	assumption (n.)
associated with (v.)	flaw (n./v.)	essence (n.)
salivation/saliva (n.)	proponent (n.)	determiner (n.)
elicit (v.)	shift (v.)	discipline (n.)
initial (adj.)	inborn (adj.)=innate	maze (n.)

Behaviorism dominated experimental psychology for several decades, and its influence can still be felt today. Behaviorism is largely responsible for establishing psychology as a scientific discipline through its objective methods and especially experimentation. In addition, it is used in behavioral and cognitive-behavioral therapy. Behavior modification is commonly used in classroom settings. Behaviorism has also led to research on environmental influences on human behavior.

B. F. Skinner (1904–1990) was an American psychologist. Like Watson, Skinner was a behaviorist, and he concentrated on how behavior was affected by its consequences. Therefore, Skinner spoke of reinforcement and punishment as major factors in driving behavior. As a part of his research, Skinner developed a chamber that allowed the careful study of the principles of modifying behavior through reinforcement and punishment. This device, known as an operant conditioning chamber (or more familiarly, a Skinner box), has remained a crucial resource for researchers studying behavior.

The Skinner box is a chamber that isolates the subject from the external environment and has a behavior indicator such as a lever or a button. When the animal pushes the button or lever, the box is able to deliver a positive reinforcement of the behavior (such as food) or a punishment (such as a noise) or a token conditioner (such as a light) that is correlated with either the positive reinforcement or punishment.

Skinner's focus on positive and negative reinforcement of learned behaviors had a lasting influence in psychology that has waned somewhat since the growth of research in cognitive psychology. Despite this, conditioned learning is still used in human behavioral modification. Skinner's two widely read and controversial popular science books about the value of operant conditioning for creating happier lives remain as thought-provoking arguments for his approach.

#### A. True or False

1. Skinner created a chamber for his experiments to study better changes in behaviour. **T**
2. Behavior modification is affected only by a positive influence. **F**
3. The participant subject in Skinner's experiments was in contact with his/her immediate environment. **F**
4. Skinner's operant conditioning theory proved to be a controversial one. **T**

#### B. Check if you know the following words

consequence (n.)	indicator (v.)
reinforcement (n.)	lever (n.)
punishment (n.)	conditioner (n.)
chamber (v.)	correlation (n.) >correlate with (v.)
resource (n.)	wane (v.)
	provoke (v.)

## 6. Maslow, Rogers and Humanism

Abraham Maslow (1908–1970) was an American psychologist who is best known for proposing a hierarchy of human needs in motivating behavior. Maslow asserted that so long as basic needs necessary for survival were met (e.g., food, water, shelter), higher-level needs (e.g., social needs) would begin to motivate behavior. According to Maslow, the highest-level needs relate to self-actualization, a process by which we achieve our full potential. Obviously, the focus on the positive aspects of human nature that are characteristic of the humanistic perspective is.

Humanistic psychologists rejected, on principle, the research approach based on reductionist experimentation in the tradition of the physical and biological sciences, because it missed the “whole” human being. Beginning with Maslow and Rogers, there was an insistence on a humanistic research program. This program has been largely qualitative (not measurement-based), but there exist a number of quantitative research strains within humanistic psychology, including research on happiness, self-concept, meditation, and the outcomes of humanistic psychotherapy.

Carl Rogers (1902–1987) was also an American psychologist who, like Maslow, emphasized the potential for good that exists within all people. Rogers used a therapeutic technique known as client-centered therapy in helping his clients deal with problematic issues that resulted in their seeking psychotherapy. Unlike a psychoanalytic approach in which the therapist plays an important role in interpreting what conscious behavior reveals about the unconscious mind, client-centered therapy involves the patient taking a lead role in the therapy session.

Rogers believed that a therapist needed to display three features to maximize the effectiveness of this particular approach: unconditional positive regard, genuineness, and empathy. Unconditional positive regard refers to the fact that the therapist accepts their client for who they are, no matter what he or she might say. Provided these factors, Rogers believed that people were more than capable of dealing with and working through their own issues.

### A. Answer the following questions.

1. Why do psychologists of the early 20<sup>th</sup> century rejected behaviorism?
2. What is the rationale behind A. Maslow’s hierarchy of needs?
3. What is Rogers’ client-centered therapy?

### B. Check if you know the following words

pessimism (n.)	self-concept (n.)	potential (n.)
reductionism (n.)	emerge (v.)	insistence (n.)
determinism (n.)	assert (v.)	meditation (n.)
intentionality (n.)	shelter (n.)	qualitative/quantitative (adj.)
predisposition (n.)	self-actualization (n.)	reveal (v.)
		unconditional (adj.)
		empathy (n.)



## 7. The Cognitive Revolution

Behaviorism's emphasis on objectivity and focus on external behavior had pulled psychologists' attention away from the mind for a prolonged period of time. The early work of the humanistic psychologists redirected attention to the individual human as a whole, and as a conscious and self-aware being. By the 1950s, new disciplinary perspectives in linguistics, neuroscience, and computer science were emerging, and these areas revived interest in the mind as a focus of scientific inquiry. This particular perspective has come to be known as the cognitive revolution. By 1967, Ulric Neisser published the first textbook entitled *Cognitive Psychology*, which served as a core text in cognitive psychology courses around the country.

Although no one person is entirely responsible for starting the cognitive revolution, Noam Chomsky was very influential in the early days of this movement. Chomsky (1928–), an American linguist, was dissatisfied with the influence that behaviorism had had on psychology. He believed that psychology's focus on behavior was short-sighted and that the field had to re-incorporate mental functioning into its purview if it were to offer any meaningful contributions to understanding behavior.

Noam Chomsky was very influential in beginning the cognitive revolution. In 2010, this mural honoring him was put up in Philadelphia, Pennsylvania.

European psychology had never really been as influenced by behaviorism as had American psychology; and thus, the cognitive revolution helped reestablish lines of communication between European psychologists and their American counterparts. Furthermore, psychologists began to cooperate with scientists in other fields, like anthropology, linguistics, computer science, and neuroscience, among others. This interdisciplinary approach often was referred to as the cognitive sciences, and the influence and prominence of this particular perspective resonates in modern-day psychology.

### A. Fill in the gaps.

1. By the 1950s, a new approach called ... was adopted psychology, computer sciences and linguistics among others.
2. What did N. Chomsky think of behaviorism?
3. Cognitive revolution was .... in nature and helped ... scientists all over the world.

### B. Check if you know the following words

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prolonged (adj.)	purview (n.)
self-aware (v./n.)	counterpart (n.)
revive (v.)	interdisciplinary (adj.)
re-incorporate (v.)	prominence (n.)
short-sighted (adj.)	resonate (v.)

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## 8. Women in Psychology's Early Days

Even though most of the early psychologists were men, women have contributed to psychology from the beginning. By 1906, in the United States about 1 psychologist in 10 was a woman. Who were these “foremothers” of psychology? Three who became well known are Mary Calkins, Christine Ladd-Franklin, and Margaret Washburn.

Mary Calkins did valuable research on memory and was also the first woman president of the American Psychological Association in 1905. Christine Ladd-Franklin studied color vision. In 1906 she was ranked among the 50 most important psychologists in America.

In 1908 Margaret Washburn published an influential textbook on animal behavior, titled *The Animal Mind*. She was the first woman to be awarded a Ph.D. in psychology in 1894. Over the next 15 years many more women followed her pioneering lead.

Today, more than half the members of the American Psychological Association are women, two out of three graduate students in psychology are women, and in recent years nearly 75 percent of all college graduates with a major in psychology have been women. Clearly, psychology has become fully open to both men and women.

### A. Match

Mary Calkins	a. published <i>The Animal Mind</i>
Margaret Washburn	b. first woman president of APA
Christine Ladd-Franklin	c. earned a PhD in psychology
	d. studied color vision

### B. Check if you know the following words

rank (v.)