

Study Guide

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For use with textbook pages 7-13

Why Study Psychology?

Key Terms

- physiological** having to do with an organism's physical processes (page 7)
- cognitive** having to do with an organism's thinking and understanding (page 7)
- psychology** the scientific study of behavior that is tested through scientific research (page 9)
- hypothesis** an assumption or prediction about behavior that is tested through scientific research (page 11)
- theory** a set of assumptions used to explain phenomena and offered for scientific study (page 11)
- basic science** the pursuit of knowledge about natural phenomena for its own sake (page 11)
- applied science** discovering ways to use scientific findings to accomplish practical goals (page 11)
- scientific method** a general approach to gathering information and answering questions so that errors and biases are minimized (page 12)

Drawing From Experience

Why do people act and think the way they do? Why do people act differently in groups than they do when they are alone? How do we know what behavior is normal and abnormal? This section introduces the reasons to study psychology. It also explains the scientific basis of psychology.

Organizing Your Thoughts

Use the diagram below to help you take notes as you read the summaries that follow. Think about how each goal helps psychologists learn more about humans and animals.

Goals of Psychology			
1. _____	2. _____	3. _____	4. _____

Read to Learn

Introduction (page 7)

Physical needs such as food and sleep are known as **physiological needs**. **Cognitive needs** cannot be seen. They are needs that take place in our minds. Cognitive needs may be just as strong as physical needs. These two types of needs motivate human behavior.

5. List one physiological need and one cognitive need that you have had today.

Gaining Insight into Behavior (page 8)

Studying psychology will help you understand your own behavior. You will learn that you share behaviors with others. You will also learn that human behavior is very complex. Your behavior is unique to you. No one else behaves exactly like you do.

6. List a behavior of yours or of a friend that you would like to understand better.

Acquiring Practical Information (page 8)

Much of what you learn about psychology can be applied to your daily life. You will learn how to use rewards to get rid of an unwanted habit. You will learn how to improve your memory and study skills. You will also learn about the difficulties that people have in their lives and what psychology can do to help.

7. What would you like to learn about how humans behave or act?

Overview of Psychology (page 9)

Psychology is the scientific study of behavior. Psychologists study both human and animal behavior. Some psychologists study only behaviors that can be observed. Others study behavior that cannot be observed such as feelings, thoughts, and motives. All psychologists use the scientific method to study behavior. This method reduces the possibility of errors and bias. Since human behavior is so complex, simple explanations of behavior are not possible.

Psychologists have four goals in studying behavior. First, they seek to describe behavior. Second, they look for explanations of the behaviors. Psychologists propose a **hypothesis** to explain a behavior. They conduct research to test the hypothesis. From the research, they propose a **theory** to explain the behavior. Theories change as new research is completed.

The third goal of psychology is prediction. Using their research, psychologists try to predict how a human or animal will act in a certain situation. Finally, the fourth goal of psychology is to influence behavior. Some psychologists research behavior. They are doing **basic science**. Other psychologists view their work as **applied science**. They look for ways to use research to help people solve problems.

Some discoveries of basic science cannot be easily applied to real situations. For example, basic science found that children who lack stimulation are slow to develop. This information helps psychologists who are working with neglected children. It does not, however, tell psychologists what kind of stimulation is most helpful.

8. If you were a psychologist, would you want to discover how human behavior works or help someone resolve their personal problems? Why?

The Scientific Basis of Psychology (page 12)

Psychologists use the **scientific method**. The scientific method reduces errors and bias. Psychologists **begin** by asking a question or identifying a specific problem. They then propose a hypothesis to answer their questions. To test their hypothesis, psychologists collect data. There are many ways to collect data, including experiments, surveys, and case studies. After they collect their data, psychologists analyze their findings to see if their hypothesis was correct.

Early psychologists had to find ways to use the scientific method to study behavior. Wilhelm Wundt set up the first psychology laboratory. Wundt used scientific principles to study sensations and feelings. His technique was called **introspection**. He asked people to examine their own mental experiences. Although introspection is no longer used, the system of observing and analyzing behavior is an important part of the scientific study of behavior.

9. You have developed a hypothesis that gray and tan cars are more likely to be sideswiped than other colors of cars. How would you test this hypothesis?

**Study
Guide****1-2****A Brief History
of Psychology***For use with textbook pages 14–22***Key Terms**

structuralist a psychologist who studied the basic elements that make up conscious mental experiences (page 16)

introspection a method of self-observation in which participants report on their thoughts and feelings (page 16)

functionalist a psychologist who studied the function (rather than the structure) of consciousness (page 16)

psychoanalyst a psychologist who studies how unconscious motives and conflicts determine human behavior (page 19)

behaviorist a psychologist who analyzes how organisms learn or modify their behavior based on their response to events in the environment (page 20)

humanist a psychologist who believes that each person has freedom in directing his or her future and achieving personal growth (page 20)

cognitivist a psychologist who focuses on how we process, store, and use information and how this information influences our thinking, language, problem solving, and creativity (page 20)

psychobiologist a psychologist who studies how physical and chemical changes in our bodies influence our behavior (page 21)

Drawing From Experience

People once believed the earth was flat. Have you ever believed something and later found it was not true? Did you change your belief? Scientists and psychologists revise theories as new information is learned.

In the last section, you learned reasons to study psychology. In this section you will study the history of psychology. You will also learn some of the modern approaches to understanding behavior.

Organizing Your Thoughts

Use the diagram on the next page to help you take notes as you read the summaries that follow. Think about how modern approaches to psychology use what the pioneers of psychology learned.

Historical Approaches	Modern Approaches
1. _____	5. _____
2. _____	6. _____
3. _____	7. _____
4. _____	8. _____
	9. _____
	10. _____

Read to Learn

Introduction (page 14)

Phrenology is the study of head shape and bumps on the skull. Phrenology is not really a science. It has been disproved. Phrenology, however, did help scientists recognize that the brain is responsible for our behavior.

11. If phrenology had been proven to be accurate, how might it have been used to predict human behavior?

The Origins of Psychology (page 15)

Psychology has its roots in philosophy. The early Greeks were the first to study human behavior. They believed the heart was more important than the mind. Scientists, such as astronomers and physicists, began using formal scientific methods during the Renaissance. Their discoveries changed the way we look at the world.

One popular idea during the seventeenth century was *dualism*. It was the concept that the mind and body are separate. René Descartes disagreed. He believed that the mind controlled the body. He assumed that one influenced the other. Psychologists today still study how the mind and body work together.

12. Why do you think the Greeks thought the heart was more important than the mind?

Historical Approaches (page 15)

Not all psychologists agree. When psychology was a young science, different schools of psychology arose. Each offered its own explanation of human behavior. The **structuralists** studied the basic elements of human experience. Wilhelm Wundt founded this school. He used **introspection** to gather information. Introspection uses self-observation. From the observed behaviors, Wundt tried to map the processes of thought.

William James is considered the father of American psychology. He believed that everything we think and do helps humans survive. His school, the **functionalists**, studied how animals and people adapt to their environments.

Sir Francis Galton studied how heredity affects behavior. Heredity consists of the traits that we receive biologically from our parents. Galton studied traits by tracing ancestry. Psychologists today still study how heredity influences behavior.

The word *Gestalt* is German. It means "whole pattern." Gestalt psychology examines whole patterns. For example, when you look at a chair, you see it as the sum of its parts. You do not see it as four legs, seat, and back. You see the whole chair. Gestalt psychology still influences the study of sensation and perception.

13. Focus for one minute on exactly what you are doing. Write a complete description of your thought processes.

Contemporary Approaches (page 17)

Many of the ideas from historical approaches to psychology are still used today. Sigmund Freud studied the unconscious mind. He believed that much of our behavior results from conflicts we face. He encouraged his patients to use *free association* to help them to resolve their conflicts. He encouraged people to analyze their dreams. Freud was a **psychoanalyst**. His job was to listen and be

objective. He encouraged patients to work through their own problems. Most of Freud's research is based on case studies.

Ivan Pavlov examined how behaviors could be conditioned. He rang a tuning fork each time he fed a dog. Soon the dog began salivating whenever it heard the tuning fork. Pavlov trained the dog to respond to the tuning fork. Researchers have shown that conditioning works with humans also.

John B. Watson believed psychology should only study *observable* behaviors. He was a **behaviorist**. He believed that all behavior was the result of conditioning. Another behaviorist, B.F. Skinner, studied *reinforcement*. He believed that behavior is shaped by the rewards that we receive. Behavior that is rewarded will be repeated.

Humanists, like Abraham Maslow and Carl Rogers, disagree with behaviorists. They believe that human behavior is not controlled by outside events like rewards. They see behavior as internal and self-directed. They seek to find ways for each person to reach his or her full potential.

Cognitivists, like Jean Piaget and Noam Chomsky, focus on thinking, problem solving, and creativity. Their research has been directed toward understanding how we store, process, and use information.

Advances in technology have opened new avenues of research for psychologists. **Psychobiologists** use PET and CAT scans to study the brain. They link genetic factors to human behavior. They have been able to see what parts of the brain are active during sleep. They are demonstrating how the mind and body work together.

A new approach to psychology is called **sociocultural psychology**. It examines how cultural and ethnic similarities and differences influence behavior. For example, what you say when you sneeze is influenced by your culture. In some cultures, sneezes are good omens. In others, they may be viewed as bad omens. If your culture believed a sneeze was a bad omen, you would try hard not to sneeze. The United States has large immigrant populations. Each immigrant group has its own culture. Conflicts can arise when one culture holds different views from another culture. Sociocultural psychologists look for ways to resolve and minimize these conflicts.

- 14.** How can social psychologists use other psychological approaches to help resolve cultural or ethnic conflicts?

Study Guide

1-3

Psychology as a Profession

For use with textbook pages 24–28

Key Terms

psychologist a scientist who studies the mind and behavior of humans and animals (page 25)

clinical psychologist a psychologist who diagnoses and treats people with emotional disturbances (page 25)

counseling psychologist a psychologist who usually helps people deal with problems of living (page 25)

psychiatry a branch of medicine that deals with mental, emotional, or behavioral disorders (page 25)

developmental psychologist a psychologist who studies the emotional, cognitive, biological, personal, and social changes that occur as an individual matures (page 26)

educational psychologist a psychologist who is concerned with helping students learn (page 26)

community psychologist a psychologist who may work in a mental health or social welfare agency operated by the government or private organization (page 26)

industrial/organizational psychologist a psychologist who uses psychological concepts to make the workplace a more satisfying environment for employees and managers (page 26)

experimental psychologist a psychologist who studies sensation, perception, learning, motivation, and emotion in carefully controlled laboratory conditions (page 28)

Drawing From Experience

What kinds of career choices are you considering? Does the idea of making discoveries about human behavior interest you? Do you like helping people? Perhaps a career in psychology is in your future.

In the last section, you learned about the different approaches to psychology. You also saw how psychology has evolved and how it continues to change. In this section, you will take a brief look at some of the specialties found in the profession of psychology.

Organizing Your Thoughts

Use the diagram on the next page to help you take notes as you read the summaries that follow. Think about the places in which you might encounter each of the specialties.

Specialty	Places in which they work:
1. clinical psychologist	
2. counseling psychologist	
3. developmental psychologist	
4. educational psychologist	
5. industrial/organizational psychologist	
6. environmental psychologist	
7. forensic psychologist	
8. health psychologist	
9. experimental psychologist	

Read to Learn

What Is a Psychologist? (page 25)

Psychologists are professionals trained to observe, analyze, and treat behavior. Most psychologists focus on a specific area of psychology. Psychologists earn advanced degrees and spend many years in training.

Psychology has many subfields. Clinical and counseling psychologists are the most numerous. Clinical psychologists treat abnormal behaviors. Counseling psychologists help people with everyday problems. For example, they can help people deal with the loss of a job.

Psychologists and psychiatrists both treat behavioral problems. Psychiatrists, however, have medical degrees. They can prescribe medicine. Psychologists often refer patients to psychiatrists.

Developmental psychologists look at the ways in which people develop over their lifetimes. Development includes physical, emotional, cognitive, and social areas. **Educational psychologists** explore intelligence, memory, and problem solving. They work closely with educators to develop new instructional tools. **Community psychologists** often work for government agencies. They design, run, or evaluate mental health clinics. Many businesses employ **industrial/organizational psychologists**. These professionals help boost worker productivity. They may develop training programs and ways to improve working conditions.

Environmental psychologists study how changes in the environment affect human behavior. For example, government agencies may consult with environmental psychologists to develop ways to help victims of natural disasters. Forensic psychologists work with attorneys and police officers. They develop profiles of criminal offenders. Health psychologists search for connections between psychological and physical health. **Experimental psychologists** conduct research, usually in a laboratory. Other psychologists use their research.

The largest professional organization for psychologists is the American Psychological Association, or APA. It has 53 sections. Each section represents a specialty that is recognized by the profession.

10. Which psychologists practice basic science? Applied science? Both types of science?

This image shows a single page from a notebook or ledger. It features ten evenly spaced, solid black horizontal lines running across the width of the page. The background is plain white, providing a clear space for writing or drawing. There are no margins, text, or other markings present on the page.