

CHAPTER ONE: What Is Psychology?**Study Guide****LEARNING OBJECTIVES**

- Define psychology.
- Distinguish psychology from pseudoscience and "psychobabble."
- Summarize the relationship between the discipline of psychology and public opinion.
- Explain eight guidelines for critical thinking.
- Summarize the early history and development of psychology and the role of empirical evidence.
- Describe the aims and methods of structuralism and functionalism.
- Describe the basic ideas of psychoanalysis.
- Describe the major principles of the biological, learning, cognitive, psychodynamic, and sociocultural perspectives in psychology.
- Discuss humanistic psychology and feminist psychology.
- Distinguish between applied and basic psychology.
- Discuss and give examples of the concerns of various specialties in psychology.
- Distinguish between a psychotherapist, a psychoanalyst, a psychiatrist, a clinical psychologist and other practicing mental health professionals.
- Identify basic areas of agreement among psychologists.

CHAPTER ONE SUMMARY

Chapter 1 defines psychology and traces the historical and disciplinary roots of the field to its current perspectives, specialties areas and activities. Critical thinking guidelines are described, and students are encouraged to understand and apply these concepts as they read the text. The complexity of human behavior requires that psychology students resist simplistic thinking and the search for simple answers. Five current perspectives and two important movements are identified. The current perspectives include the biological perspective, learning perspective, cognitive perspective, psychodynamic perspective and sociocultural perspective. The two important movements are the feminist and humanistic movements. Each of these approaches reflects a different emphasis and approach to understanding human behavior. Students are encouraged to think about human behavior from each different perspective and use their critical thinking skills to compare and contrast these approaches. A review of the specialty areas within the field helps students appreciate that psychology includes vastly diverse topics and that psychologists are engaged in a wide variety of occupations. Examples include educational psychologists, developmental psychologists, and psychometric psychologists. The practice of psychology, which helps people with mental health problems, is discussed along with a description of types of practitioners within the field of psychology (e.g., counseling psychologists, school psychologists) and those outside of it.

PSYCHOLOGY, PSEUDOSCIENCE, AND POPULAR OPINION

Psychology - scientific study of behavior and mental processes, and how they are affected by an organism's physical-state, mental state and the external environment

Psychobabble - pseudoscience covered by veneer of psychological language; psychology is based on research evidence, whereas popular opinion is not; psychobabble confirms existing beliefs; psychology challenges them and deepens our understanding of accepted facts.

THINKING CRITICALLY AND CREATIVELY ABOUT PSYCHOLOGY

Critical thinking - ability and willingness to assess claims and make objective judgments on the basis of well-supported reasons and evidence rather than emotion and anecdote; the basis of all science.

Eight critical-thinking guidelines:

1. Ask questions; be willing to wonder
2. Define your terms
3. Examine the evidence
4. Analyze assumptions and biases
5. Avoid emotional reasoning
6. Don't oversimplify
7. Consider other interpretations
8. Tolerate uncertainty

PSYCHOLOGY'S PAST: FROM THE ARMCHAIR TO THE LABORATORY

- A. Early history
- B. The birth of modern psychology and Wilhelm Wundt
- C. Three early psychologies
 1. Structuralism and E.B. Titchener
 2. Functionalism and William James
 3. Psychoanalysis and Sigmund Freud

PSYCHOLOGY'S PRESENT: BEHAVIOR, BODY, MIND, AND CULTURE

The major psychological perspectives:

Biological perspective examines how bodily events interact with the environment to produce perceptions, memories and behavior.

The learning perspective examines how the environment and experience affect a person's actions.

The cognitive perspective emphasizes what goes on in people's heads; reasoning, remembering, understanding, problem solving.

The sociocultural perspective focuses on the social and cultural forces outside the individual that shape every aspect of behavior.

The psychodynamic perspective deals with unconscious dynamics within the individual, such as inner forces, conflicts, or instinctual energy.

Two influential movements in psychology:

Humanistic psychology rejects the psychoanalytic perspective as too pessimistic and behaviorism as too mechanistic.

Feminist psychology analyzes the influence of social inequities on gender relations and identifies biases in research and psychotherapy.

WHAT PSYCHOLOGISTS DO

Overview of professional activities

- Teach and conduct research in colleges and universities
- Provide health or mental health services (psychological practice)
- Conduct research or apply its findings in nonacademic settings

Psychological research

Basic psychology - research that seeks knowledge for its own sake.

Applied psychology - research concerned with practical uses of knowledge. Some major non-clinical specialties in psychology: experimental psychologists, psychometric psychologists, developmental psychology industrial/organizational psychologists, educational psychologists

Psychological practice

1. Those who try to understand and improve physical and mental health
2. Practitioners of psychology work in mental or general hospitals, clinic schools, counseling centers, and private practice

Types of practitioners

Counseling psychologists, school psychologist clinical psychologists; Degrees for practice: Ph.D., Ed.D., Psy.D.

Types of non-clinical psychologist practitioners: psychotherapist, psychoanalyst, psychiatrist, social worker Psychology in the community

THE MOSAIC OF PSYCHOLOGY

1. Variety in psychologists' activities, goals, perspectives creates a mosaic.
2. Though there is disagreement about emphasis, psychological scientists, scientist-clinicians agree on basic guidelines:
 1. Most believe in importance of empirical evidence
 2. Most reject supernatural explanations of events
 3. Share a fascination with human behavior and mind

CHAPTER TWO: How Psychologist Do Research**Study Guide****LEARNING OBJECTIVES**

- After studying this chapter, you should be able to do the following:
- List the reasons research methods are important to psychologists.
- List and discuss the characteristics of scientific psychological research.
- List and discuss the characteristics of descriptive research methods.
- Describe and give examples of case studies, naturalistic observation, laboratory observation, tests, and surveys. Discuss the advantages and disadvantages of each.
- List and discuss the characteristics and limitations of correlational studies and provide examples of positive and negative correlations.
- Distinguish between independent and dependent variables and identify examples of each.
- Distinguish between experimental and control groups and discuss the use of placebos.
- Describe single- and double-blind studies and explain how they improve experiments.
- Discuss the advantages and limitations of experimental research.
- List and describe the types of descriptive statistics.
- Describe how inferential statistics are used and explain statistical significance.
- Compare and contrast cross-sectional and longitudinal studies.
- Describe the technique of meta-analysis.
- Discuss the principles of the ethical code for conducting research with human beings.
- Discuss ethical problems in research, including the use of animals and deception.
- Describe some of the reasons for using animals in research.

CHAPTER TWO SUMMARY

Chapter 2 discusses the importance of understanding scientific methodology in order to critically evaluate research findings. The text describes the characteristics of scientific research that should be used to evaluate research findings in psychology and in other fields. Three major types of research studies are described: descriptive studies, correlational studies and experimental studies. Descriptive studies include case studies, observational studies, studies based on psychological tests, and studies based on surveys. Correlational studies are a special category of descriptive studies that describe relationships between two variables. Correlational research is very useful in making predictions from one variable to another. Experimental research is the best type to determine cause and effect relationships because it is conducted in a highly controlled fashion. The components of experimental research include independent and dependent variables, random assignment to conditions, and experimental and control conditions. Potential biases in conducting research are discussed, as well as methods to reduce such bias (e.g., single-blind and double-blind studies). The text explains descriptive and inferential statistics and demonstrates how they help to make research findings meaningful. Finally, the ethical concerns revolving around studying human beings and animals are discussed.

WHAT MAKES PSYCHOLOGICAL RESEARCH SCIENTIFIC?

Why are research methods so important to psychologists?

1. Helps separate truth from unfounded belief
2. Helps sort out conflicting views
3. Helps correct false ideas that may cause people harm

What makes research scientific?

1. Precision
 - a. Start with a theory: organized system of assumptions and principles that purports to explain certain phenomena
 - b. From a hunch or theory, derive a specific hypothesis
 - c. Operational definitions: terms must be defined in ways that can be observed and measured
2. Skepticism: accept conclusions with caution but be open to new ideas.
3. Reliance on empirical evidence rather than on personal accounts.
4. Willingness to make "risky predictions" and the principle of falsifiability.
5. Openness in the scientific community so that findings can be replicated.

DESCRIPTIVE STUDIES: ESTABLISHING THE FACTS

A. Case Studies – detailed descriptions of particular individuals

1. Advantages include producing detailed picture of one individual
2. Disadvantages: rely on possibly inaccurate memories, cannot generalize to all human behavior, do not test hypotheses

B. Observational Studies – observing, recording behavior without interfering

1. Naturalistic observation
2. Laboratory observation: scientist has greater control but subject might alter his or her behavior

C. Tests (assessment instruments) - procedures to measure personality traits, emotional states, aptitudes, interests, abilities and values

1. Types of tests

- a. Objective tests - measure states of which person is aware
- b. Projective tests - designed to tap unconscious

2. Characteristics of a good test

- a. *Standardization* - uniform procedures for giving, scoring the test
- b. *Norms* - established standards of performance
- c. *Reliability* - getting the same results from one time to another
 - (1) Test-retest - giving the same test twice
 - (2) Alternate-forms - giving different versions of the same test
- d. *Validity* - a test measures what it set out to measure
 - (1) Content validity - test questions ask about a broad array of beliefs and behaviors relevant to what is being measured
 - (2) Criterion validity - predicts other measures of the trait

CORRELATIONAL STUDIES: LOOKING FOR RELATIONSHIP

A. *Purpose* - to determine whether two variables are related, and if so, how strongly.

B. *Characteristics of correlations*

1. Direction of a relationship between variables:

- a. Positive correlation - high values of one variable are associated with high values of the other; low values of one variable are associated with low values of the other
- b. Negative correlation - high values of one variable are associated with low values of the others

2. Correlation coefficient indicates the strength of relationship between the two variables; ranges from -1 (strong negative) to +1 (strong positive)

C. *Benefits and limitations of correlations*

1. Benefit - allows someone to predict from one variable to another.
2. Limitation - cannot show causation

D. *Surveys*

1. Gather information by asking people directly.
2. Potential problems with surveys (e.g., bias in question wording, representativeness of sample, lying or forgetting by subjects).

EXPERIMENTS: HUNTING FOR CAUSES

A. *Purpose of experimentation* - to look for causes of behavior because the experiment allows the researcher to control the situation being studied.

B. *Experimental variables* - the characteristics the researcher is studying.

1. Independent variable - the characteristic manipulated by the experimenter.
2. Dependent variable - the behavior the researcher tries to predict.

C. *Experimental and control conditions*

1. Experimental condition - the condition or group in which subjects receive some amount of the independent variable.
2. Control condition - the condition or group in which subjects do not receive any amount of the independent variable.
3. Random assignment balances individual differences among subjects between the two groups.

D. *Experimenter effects*

1. Single-blind studies - subjects don't know whether they are in the experimental or control group.
2. Double-blind studies - neither the experimenter nor the subjects know which subjects are in which group.

E. *Advantages and limitations of experiments*

1. Experiments allow conclusions about cause and effect
2. The setting is artificial and subjects' behavior may differ from real life

EVALUATING THE FINDINGS

A. *Descriptive statistics*: Summarize group data:

1. Arithmetic mean compares group scores between two or more groups.
2. Standard deviation shows how clustered or spread out individual scores are around the mean.

B. *Inferential statistics*: Asking "So What?"

1. Determines the likelihood that the result of the study occurred by chance
2. Statistical significance - the result is expected to occur by chance fewer than 5 times in 100; it does not necessarily indicate real-world importance
3. Statistically significant results allow general predictions to be made about human behavior, though not about any particular individual

C. Interpreting the findings: What is the best explanation for the findings?

1. Researchers must test a hypothesis in different ways several times
 - a. Cross-sectional studies - compare groups at one time
 - b. Longitudinal studies - study subjects across the life span
2. Researchers must judge the result's importance with procedures like metaanalysis that combine and analyze data from many studies

KEEPING THE ENTERPRISE ETHICAL

A. The ethics of studying human beings

1. American Psychological Association's ethical code
 - a. Dignity and welfare of subjects must be respected
 - b. People must participate voluntarily and give informed consent
 - c. Subjects must be free to withdraw from a study at any time

2. Use of deception: Researchers are required to consider alternatives to deception, show that a study's potential value justifies the use of deception, and debrief subjects about the study's true purpose afterward.

B. The ethics of studying animals

1. Many purposes exist for conducting research using animals (e.g., basic research on a particular species, improve human welfare).
2. Treatment and regulations have improved due to opposition.