



Study and Review Guide
to Accompany

Psychology In Action

5th Edition

Karen Huffman / Palomar College

Mark Vernoy / Palomar College

Judith Vernoy

Study and Review Guide Prepared by:

Karen Huffman / Palomar College

Richard Hosey / Palomar College

Study and Review Guide

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as permitted under Sections 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, (508) 750-8400, fax (508) 750-4470. Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc. 605 Third Avenue, New York, NY 10158-0012, (212) 850-6008, E-mail: PERMREQ@WILEY.COM. To order books or for customer service call 1-800-CALL-WILEY (225-5945).

ISBN 0-000-00000-0

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1

TIPS

FOR USING THIS STUDY AND REVIEW GUIDE

Congratulations! Your decision to buy and use this study and review guide is an important step toward student success. It is carefully designed to help you learn the most important material in your textbook (in the shortest possible time), to improve your performance on quizzes and exams, and ultimately to help you achieve the highest grade possible in your first introduction to psychology course.

This study and review guide is coordinated with your text, *Psychology in Action* (5th ed.), and is divided into seven major sections: *Chapter Outlines*, *Learning Objectives*, *Key Terms*, *Active Learning Exercises*, *Chapter Overview*, *Self-Tests*, and *Answers*. These seven sections are explained and identified throughout each chapter with the following boxes and icons:

OUTLINE (Survey & Question)

This outline is intended to help you *survey* the chapter. As you read through the various sections, write down any *questions* or comments that come to mind in the space provided. This is a valuable part of active learning and the SQ4R method. It not only makes your reading time more enjoyable and active, but it also increases your retention and understanding of the material.



LEARNING OBJECTIVES (Read, Recite & wRite)

While *reading* the chapter, stop periodically and *recite* (or repeat in your own words) the answers to the following learning objectives. It will also help your retention if you *write* your answer in the space provided. (Page numbers refer to the text *Psychology in Action*, 5th Ed.)



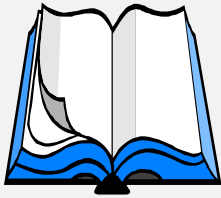
KEY TERMS (Review)

The *review* step in the SQ4R method is very important to your performance on quizzes and exams. Upon completion of this chapter, you should be able to define the following terms.



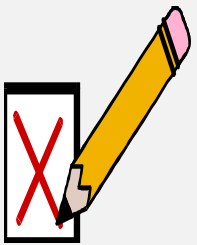
ACTIVE LEARNING EXERCISES (Recite)

The *recite* step in the SQ4R method requires you to be an ACTIVE learner. By completing the following exercises, you will test and improve your mastery of the chapter material, which will also improve your performance on quizzes and exams. Answers to some exercises appear at the end of this study and review guide chapter.



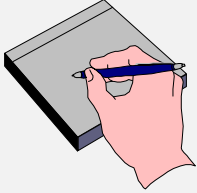
CHAPTER OVERVIEW (Review)

The following CHAPTER OVERVIEW provides a narrative overview of the main topics covered in the chapter. Like the Visual Summary found at the end of each chapter in the text, this narrative summary provides a final opportunity to *review* chapter material.



SELF-TESTS (Review & write)

Completing the following SELF-TESTS will provide immediate feedback on how well you have mastered the material. In the *fill-in exercises*, write the appropriate word or words in the blank spaces. The *matching exercise* requires you to match the terms in one column to their correct definitions in the other. For the *multiple-choice questions* in Practice Tests I and II, circle or underline the correct answer. When you are unsure of any answer, be sure to highlight or specially mark the item and then go back to the text for further review. Correct answers are provided at the end of this study and review guide chapter.



ANSWERS

The following answers to active learning exercises, fill-ins, matching exercises, and practice tests 1 and 2 provide immediate feedback on your mastery of the material. Try not to simply memorize the answers. When you are unsure of your “guess” or make an error, be sure to go back to the textbook and carefully review. This will greatly improve your scores on classroom exams and quizzes.

Did you notice that most of these sections have terms in parentheses, such as (Survey & Question), (Read, Recite & write), and (Review & write)? This is because both your study and review guide and text, Psychology in Action, are designed around the best-known studying technique—the SQ4R method. The symbols “S, Q, R, R, R” stand for:

Survey

Before you begin reading each chapter of the text, you should skim it. Note the title, major headings and subheadings, and figure captions. Then read the interim summaries that come before each set of review questions sprinkled throughout the chapter. Finally, carefully examine the visual summary at the end of the chapter. This survey helps organize the material into a larger unit that will help focus your attention during later careful reading and studying.

The “Survey” step also provides a “map” or “big picture” of the chapter contents. If you were new to the United States and planning a car trip from California to New York, you wouldn’t jump in your car and simply start driving. However, most students do jump into their texts and start reading the first page with no idea of what road signs to look for or what lies ahead. To make the most of your car trip to New York, you would begin with a large map of the entire United States and try to plan the most efficient route. Similarly, since you are “new” to the country of psychology, you need to begin with a large overall road map--the SURVEY step of the SQ4R method.

Question

As you are surveying the material, ask yourself questions about what you are going to read. (What did your instructor say about this topic when it was assigned? What questions do the headings and subheadings suggest? What will I learn in this chapter? How can I use this information in my

everyday life?) Questions aid retention because they require active participation on your part and increase personal relevance of the material.

Read

The survey and question procedure provides a natural lead-in to careful reading. While reading the chapter, attempt to answer the questions you generated, as well as paying close attention to all figures, tables, and **boldfaced** terms. Read in small units from one major heading to the next. In Chapter 6 of your textbook, you will note that cramming or massed learning is not a good method for studying, retention, or retrieval of information. Space your studying throughout the time period allocated by your instructor for the assigned chapters. This method of “distributed versus massed practice” has been scientifically proven to be more effective than cramming because you retain more information and will remember it longer.

Recite

“Recite” means to go over what you just read by orally summarizing, making notes, and/or completing the review questions in the text (and the active learning exercises in this study and review guide). Have you ever found yourself having to reread sections of a text because your mind wandered off as you were studying? Do you find that you can spend hours studying and yet remember little of what you’ve read? This is because you are not “reciting.” A well-known principle of education states that learning is much more effective when people are *actively* responding to the material than when they are *passive* recipients. By orally summarizing, taking notes, completing the review questions and active learning exercises, you will be taking an active role in your studying—and your grades will improve!

Review

Reviewing is a combination of the total SQ4R formula. Briefly repeat the survey and questioning you did before you began the chapter, reread all your notes (from the text, your class lecture notes, and notes in this study guide). Check your memory by completing the review questions in the text and the self-tests in this study and review guide.

wRite

Writing is a very important element in learning. By writing a response and taking notes while reading or listening to lectures, you will retain more than simply listening to a lecture or silently reading a text. This study and review guide is purposely designed in a workbook format to allow space for writing responses to the learning objectives, your definitions for the key terms, your responses to the activities, and your answers to the sample self-tests. Taking this study and review guide with you to class is also an important aid in organizing your lecture notes.

The SQ4R method can be used with any textbook. However, your Psychology in Action (5th ed.) textbook and this study and review guide have been carefully designed to maximize this technique. We hope you will try this method and actively use this study and review guide. Research finds those students who purchase and USE study guides generally do better on exams and overall course performance. Your text has numerous “tools for student success,” your instructor is available to assist and inspire you, and this study and review guide is here to guide and support your studying efforts. The next step is yours. Best wishes for an exciting journey in the new country called “Psychology.”

Karen Huffman/Palomar College
Richard Hosey/Palomar College

Chapter

1

Introducing
Psychology

OUTLINE (Survey & Question)

This outline is intended to help you *survey* the chapter. As you read through the various sections, write down any *questions* or comments that come to mind in the space provided. This is a valuable part of active learning and the SQ4R method. It not only makes your reading time more enjoyable and active, but it also increases retention and understanding of the material.

TOPIC

NOTES

I. UNDERSTANDING PSYCHOLOGY

- A. The Goals of Psychology: To Describe, Explain, Predict, and Change Behavior

- B. Areas of Psychology: A Field of Diversity

- C. Psychology in Your Life: Separating Fact from Fiction

II. PSYCHOLOGICAL RESEARCH

- A. Experimental Research: The Study of Cause and Effect

- B. Research Highlight: Love on a Suspension Bridge
- C. Nonexperimental Research: Studying the Correlates of Behavior
- D. Correlation versus Experimental Methods: Which Is Appropriate?
- E. Evaluating Research: Are the Findings Significant?
- F. Active Learning: Becoming a Better Consumer of Scientific Research

III. ETHICS IN PSYCHOLOGY

- A. Research Ethics: Respecting the Rights of Research Participants
- B. Animals in Research: Is it Ethical?
- C. Clinical Practice Ethics: Respecting the Rights of Clients

IV. SCHOOLS OF PSYCHOLOGY

- A. Structuralism and Functionalism: The Earliest Schools
- B. The Psychoanalytic and Gestalt Schools: European Contributions

Study and Review Guide

- C. Behaviorism: The Study of Observable Behaviors
- D. Humanistic Psychology: Emphasizing the Uniqueness of the Individual
- E. Cognitive Psychology: The Return to Thought Processes
- F. Psychobiology: The Brain and Behavior
- G. The Evolutionary Perspective: Natural Selection and Human Behavior
- H. Cultural Psychology: The Influence of Culture and Ethnic Practice on Behavior
- I. Gender and Cultural Diversity: Universal and Culturally Specific Behaviors
- J. Psychology Today: An Eclectic View



LEARNING OBJECTIVES (Read, Recite & wRite)

While *reading* the chapter, stop periodically and *recite* (or repeat in your own words) the answers to the following learning objectives. It will also help your retention if you *write* your answer in the space provided. (Page numbers refer to the text Psychology in Action, 5th Ed.)

1. Define psychology, and explain overt and covert behavior (p. 4-5).

Study and Review Guide

2. List and discuss the four goals of psychology, and explain the difference between basic and applied research (pp. 5-6).
3. List and describe the ten major areas of psychology (p. 6-8).
4. Describe the difference between psychology and pseudopsychology (p. 8-10).
5. Define or describe the following components related to scientific research in general: research methodology, data, the study of cause and effect, theory, and hypothesis (pp. 10-13).
6. Define or describe the following components related to experimental research: independent and dependent variables, experimental and control conditions, and placebos and their effects (pp. 12-14).
7. List and describe the following possible sources of, and solutions for, bias in research: experimenter bias and the double-blind experiment; ethnocentrism and the need for multiple, culturally different researchers; and sample bias, including the difference between populations and samples, and the need for random assignment of participants to experimental and control conditions (pp. 14-15).
8. List and describe four possible explanations for the results of the Dutton and Aron "bridge study" (p. 16).
9. Discuss the merits and limitations of the following nonexperimental research techniques: naturalistic observation, survey, and case study (pp. 17-19).

10. Explain the difference between correlational (nonexperimental) and experimental methods of research, and describe the three ways two variables may be correlated (pp. 19-21).
11. Describe the four basic criteria used to ensure that research findings are accurate and legitimate. Define statistics, and describe the relevance of statistical significance and replication in determining the legitimacy of research results (pp. 22-23).
12. Discuss the issue of ethics in animal research, and describe the following ethical considerations for human research and clinical practice: informed consent, debriefing, deception, and client confidentiality (pp. 23-25).
13. Describe the similarities and differences between the following major schools of psychology: structuralism, functionalism, psychoanalytic, gestalt, behaviorism, humanistic, cognitive, psychobiology, and evolutionary (pp. 26-32).
14. Define culture, and describe cultural psychology and culture's influence on behavior; discuss how researchers determine whether behavior is culturally universal or culturally specific (pp. 32-33).
15. List the six perspectives in psychology today, and explain the eclectic approach, which is prevalent in modern psychology (p. 33).



KEY TERMS (Review)

The *review* step in the SQ4R method is very important to your performance on quizzes and exams. Upon completion of this chapter, you should be able to define the following terms.

Applied Research: _____

Study and Review Guide

Basic Research: _____

Behavior: _____

Behaviorism: _____

Case Study: _____

Cognitive Psychology: _____

Control Condition: _____

Correlation: _____

Covert: _____

Culture: _____

Cultural Psychology: _____

Study and Review Guide

Data: _____

Debriefing: _____

Dependent Variable: _____

Double-Blind Experiment: _____

Eclectic Approach: _____

Ethnocentrism: _____

Ethology: _____

Evolutionary Perspective: _____

Experiment: _____

Experimental Condition: _____

Experimenter Bias: _____

Study and Review Guide

Functionalism: _____

Gestalt: _____

Gestalt Psychology: _____

Humanistic Psychology: _____

Hypothesis: _____

Independent Variable: _____

Information Processing Approach: _____

Introspection: _____

Naturalistic Observation: _____

Overt: _____

Study and Review Guide

Placebo: _____

Placebo Effect: _____

Population: _____

Pseudopsychologies: _____

Psychoanalytic Theory: _____

Psychobiology: _____

Psychology: _____

Psychotherapy: _____

Replicate: _____

Research Methodology: _____

Sample: _____

Study and Review Guide

Sample Bias: _____

Sociobiology: _____

Statistically Significant: _____

Statistics: _____

Stimulus: _____

Structuralism: _____

Surveys: _____

Theory: _____

Unconscious: _____

Variables: _____



ACTIVE LEARNING EXERCISES (Recite)

The *recite* step in the SQ4R method requires you to be an ACTIVE learner. By completing the following exercises, you will test and improve your mastery of the chapter material, which will also improve your performance on quizzes and exams. Answers to some exercises appear at the end of this study guide chapter.

ACTIVE LEARNING EXERCISE I

For each of the three studies:

- Decide whether the study is correlational or experimental.
- If the study is correlational, briefly describe how the variables are related and whether the correlation is positive, negative, or zero.
- If the study is experimental, identify the independent variable (IV) and dependent variable (DV).

Study I

A Dartmouth study found that lifetime earnings for women who graduate from college is approximately the same as that of men who graduate from high school.

Study II

An Australian study found that MSG does not cause people to be sick, as previously reported. The researcher informed participants he was studying ingredients in a new soft drink and fed them either MSG or a placebo in the drink. The same number and type of symptoms were found in both the MSG and the placebo groups.

Study III

USA Today reported a major University study that found couples who live together before marriage are more likely to divorce than couples who don't.

ACTIVE LEARNING EXERCISE II

To help you understand and appreciate the complexity of the experimental method, think of a specific problem or topic that you are interested in studying. For example, "Does caffeine increase studying effectiveness?" Now answer the following:

1. What would be your hypothesis?

2. What would be the independent and dependent variable(s)?
3. List possible experimental controls for the experiment.
4. Could your hypothesis also be tested with nonexperimental methods? If so, describe them.

ACTIVE LEARNING EXERCISE III

Applying Abstract Thinking (A Cognitive Skill)

In Chapter 1 of your textbook, you learned useful research terminology that can be used to also evaluate reports from politicians, advertisers, teachers, the news media, and even close friends. The following exercise will allow you to actively evaluate these sources of information. Read each "research" report and decide what is the primary problem or research limitation. In the space provided, make one of the following marks:

CC = The report is misleading because correlational data are used to suggest causation.

CG = The report is inconclusive since there was no control group.

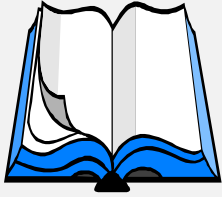
EB = The results of the research were unfairly influenced by experimenter bias.

SB = The results of the research are questionable because of sample bias.

_____ 1. William owns a company in New York City that makes shoes for women. He is concerned with slumping sales and decides to conduct a survey in one of his factories to determine how female employees feel about shoes produced in Italy.

_____ 2. At a major league baseball park, researchers found that beer and soft-drink sales are highest when color advertising is used on all billboards.

_____ 3. After failing an important exam in his psychology class, Alex decides to personally interview fellow classmates regarding their opinion of the professor's teaching techniques.



CHAPTER OVERVIEW (Review)

The following CHAPTER OVERVIEW provides a narrative overview of the main topics covered in the chapter. Like the Visual Summary found at the end of each chapter in the text, this narrative summary provides a final opportunity to review chapter material.

I. Understanding Psychology *Psychology is the scientific study of behavior. Psychologists use scientific research methods to investigate overt, or observable, behaviors and covert, or hidden, behaviors such as thoughts and feelings.*

The goals of psychology are to describe, explain, predict, and change behavior. Psychologists conduct research and can specialize in several areas, including clinical, counseling, educational, developmental, social, industrial and organizational psychology, and neuropsychology. Basic research studies theoretical issues; applied research seeks to solve specific problems.

II. Experimental Research *Research methodology includes experimental techniques designed to investigate cause-and-effect relationships and nonexperimental techniques that describe behavior.*

An experiment begins with a hypothesis or possible explanation for behavior. Independent variables are the factors the experimenter manipulates, and dependent variables are measurable behaviors of the participants. Experimental control includes assigning participants to groups and holding extraneous variables constant.

III. Nonexperimental Research *Research methodology includes experimental techniques designed to investigate cause-and-effect relationships and nonexperimental techniques that provide descriptions of behavior.*

Nonexperimental research techniques are used to obtain descriptions of behavior. Naturalistic observation is used to study behavior in its natural habitat. Surveys use interviews or questionnaires to obtain information about a sample of participants. Individual case studies are in-depth studies of a single participant. Experiments enable us to determine causes for behaviors, whereas correlational relationships only enable us to predict behaviors. Psychologists use statistics to judge whether research findings are significant or due to chance.

IV. Ethics in Psychology *Psychologists are expected to maintain high ethical standards in their relations with human and animal research participants and in therapeutic relationships with clients. The APA has published specific guidelines detailing these ethical standards.*

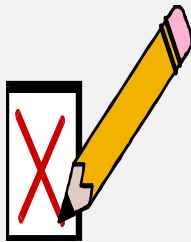
V. Schools of Psychology *Structuralists sought to identify elements of consciousness and how these elements form the structure of the mind. Functionalists studied how mental processes help individuals adapt to their environment.*

Freud developed psychoanalytic theory to explain psychological problems reportedly caused by unconscious conflicts. The Gestalt school studied organizing principles of perceptual processes.

Behaviorism emphasizes observable behaviors and the ways they are learned. Humanistic psychology focuses on inner meanings and assumes our nature is positive and growth seeking. Cognitive psychology examines reasoning and mental processes.

Psychobiology attempts to explain behavior as complex chemical and biological events in the brain. The evolutionary perspective argues that certain behavioral characteristics have evolved through the process of natural selection. Cultural psychology studies the influence of culture and ethnic practices on people's behavior.

SELF-TESTS (Review & write)



Completing the following SELF-TESTS will provide immediate feedback on how well you have mastered the material. In the *fill-in exercises*, write the appropriate word or words in the blank spaces. The *matching exercise* requires you to match the terms in one column to their correct definitions in the other. For the *multiple-choice questions* in Practice Tests I and II, circle or underline the correct answer. When you are unsure of any answer, be sure to highlight or specially mark the item and then go back to the text for further review. Correct answers are provided at the end of this study guide chapter.

FILL-IN EXERCISES

1. Your text defines psychology as the _____ (p. 4).
2. The goals of psychology are to _____ (p. 5).
3. Basic research studies _____, while applied research is conducted to _____ (pp. 5-6).
4. The causes of behavior can be determined by using the _____ method of research (p. 11).
5. A(n) _____ is a factor that is selected and manipulated by the experimenter and is totally independent of anything the research participant does (p. 12).
6. Generalizability, or the application of research to a group or population, is most directly affected by _____ (p. 15).

Study and Review Guide

7. When researchers _____ their research participants, they explain the reasons for conducting the research and clear up any misconceptions or concerns (p. 24).
8. Explaining behavior in terms of unconscious drives and conflicts is key to the _____ perspective (p. 29).
9. _____ emphasizes the importance of the inner, subjective self and stresses the positive side of human nature (p. 30).
10. The six steps in the SQ4R method for active reading are _____, _____, _____, _____, _____, and _____ (p. 38).

MATCHING EXERCISES

Column A

- a. Behaviorism
- b. Cognitive Psychology
- c. Cultural Psychology
- d. Evolutionary Perspective
- e. Functionalism
- f. Gestalt Psychology
- g. Humanistic Psychology
- h. Psychobiology
- i. Psychoanalytic Theory
- j. Structuralism.

Column B

1. ____ Studies how mental processes help adaptation.
2. ____ Emphasizes influence of the unconscious mind.
3. ____ Focuses on mental processing of information.
4. ____ Focuses on sensations and feelings and perception.
5. ____ Studies the biology of behavior.
6. ____ Believes the whole is greater than the sum of the parts.
7. ____ Derived from theory of evolution and natural selection.
8. ____ Studies influence of culture and ethnicity on behavior.
9. ____ Focuses on objective or observable behaviors.
10. ____ Emphasizes inner, subjective self and positive nature.

PRACTICE TEST I

1. Which of the following are the goals of psychology?
 - a. describe, manipulate, control, and examine behavior
 - b. describe, explain, predict, and change behavior
 - c. predict, control, examine, and change behavior
 - d. manipulate, control, explain, and change behavior
2. Basic research is conducted to study _____.
 - a. basic psychological needs such as hunger, socialization, and the need for praise
 - b. theoretical questions that may or may not have real-world applications
 - c. the goals of psychology
 - d. a specific real-world problem

Study and Review Guide

3. Applied research is conducted to study _____.
 - a. how people apply knowledge in an educational setting
 - b. theoretical questions that may or may not have real-world applications
 - c. the goals of psychology
 - d. a specific real-world problem

4. Amanda studies animals to gain insight into human behavior. She is a(n) _____ psychologist.
 - a. comparative
 - b. evolutionary
 - c. developmental
 - d. interspecies

5. The belief that behavior in your culture is typical of behavior in all other cultures is one definition of _____.
 - a. ideology
 - b. ethnocentrism
 - c. prejudice
 - d. ethnic typing

6. Only the experiment allows one to investigate _____.
 - a. relationships
 - b. correlations
 - c. causation
 - d. the goals of psychology

7. An educated guess or a possible explanation for a behavior being studied, that is expressed as a prediction or a statement of cause and effect is a(n) _____.
 - a. correlation
 - b. experiment
 - c. hypothesis
 - d. theory

8. An experimenter wishes to see if there is a difference between two types of memory techniques. She teaches one group of participants Technique A and another group Technique B. Then she gives each group a list of words to memorize. Two weeks later she tests the participants to see how many of the words they have remembered. What is the dependent variable in this experiment?
 - a. number of words in the list
 - b. memory techniques
 - c. sex of the experimenter
 - d. number of words remembered

Study and Review Guide

9. What is the independent variable in the experiment described in the previous question?
 - a. number of words in the list
 - b. memory techniques
 - c. sex of the experimenter
 - d. number of words remembered

10. When participants are not exposed to any amount or level of the independent variable, they are members of the _____.
 - a. control condition
 - b. experimental condition
 - c. observation group
 - d. out-of-control group

11. The tendency of experimenters to influence the results of their experiment in an expected direction is called _____.
 - a. experimenter bias
 - b. control bias
 - c. observational bias
 - d. experimental bias

12. When neither the researcher nor the participants in an experiment know whether the treatment or independent variable has been given to any participant, the research design can be called _____.
 - a. reliable
 - b. double-blind
 - c. valid
 - d. deceptive

13. When researchers systematically observe the behavior of animals or humans in their natural state or habitat, they are conducting a(n) _____.
 - a. experiment
 - b. naturalistic observation
 - c. case study
 - d. survey
 - e.

14. _____ is generally credited with being the founder of experimental psychology.
 - a. Sigmund Freud
 - b. Wilhelm Wundt
 - c. William James
 - d. G. Stanley Hall

Study and Review Guide

15. The school of psychology that sought to study the elements of conscious experience was _____.
 - a. functionalism
 - b. Gestalt
 - c. behaviorism
 - d. structuralism

16. William James was the leading force in the _____ school of psychology.
 - a. behaviorist
 - b. functionalist
 - c. structuralist
 - d. humanistic

17. Who developed psychoanalytic theory?
 - a. Freud
 - b. James
 - c. Wundt
 - d. Watson

18. Gestalt psychology studied the _____.
 - a. psyche
 - b. perception of wholes
 - c. elements of perception
 - d. patterns of stimulus and response

19. Humanistic psychology emphasizes the _____.
 - a. psyche
 - b. perception of wholes
 - c. positive and growth seeking nature of humans
 - d. inner thinking processes necessary for human interaction

20. The information processing approach is used by _____.
 - a. humanistic psychologists
 - b. behaviorists
 - c. functionalists
 - d. cognitive psychologists

PRACTICE TEST II

1. According to your text, _____ uses strict scientific methods to collect, analyze, and interpret information about behavior and mental processes.
 - a. psychology
 - b. philosophy
 - c. behaviorism
 - d. research methodology

2. You dread going to the grocery store because you got lost there when you were a child. This illustrates psychology's goal of _____ behavior.
 - a. describing
 - b. explaining
 - c. predicting
 - d. changing

3. Someone who uses PET scans to compare brain processes in people with and without depression is called a _____.
 - a. health psychologist
 - b. neuropsychologist
 - c. psychiatrist
 - d. PET technician

4. _____ rely on nonscientific or deliberately fraudulent methods to explain personality.
 - a. Pseudopsychologies
 - b. Sociologists
 - c. Astronomers
 - d. Counselors

5. A _____ develops from an attempt to explain a set of interrelated data from several studies.
 - a. hypothesis
 - b. correlation
 - c. research study
 - d. theory

6. In an experiment, the researcher _____.
 - a. isolates a single factor and examines its effects on a behavior
 - b. controls the dependent variable and measures the independent variable
 - c. deceives subjects, manipulates variables, and makes correlations
 - d. observes one behavior to the exclusion of all other variables

Study and Review Guide

7. In the statement, "This causes that," *this* is the _____.
 - a. constant
 - b. independent variable
 - c. dependent variable
 - d. hypothesis

8. Experimenter bias occurs when the researcher _____.
 - a. studies only what is interesting to him or her
 - b. changes the results to fit the hypothesis
 - c. unintentionally provides subtle cues about the purpose of the study, which affects the results
 - d. takes credit for the work done by his or her research assistants

9. The total of all possible cases from which a sample is selected is called the _____.
 - a. subject pool
 - b. population
 - c. selection group
 - d. control group

10. Someone who systematically records behavior in a participant's normal habitat is engaged in _____.
 - a. naturalistic observation
 - b. voyeurism
 - c. a case study
 - d. random observation

11. The only research method that allows you to make cause-and-effect statements about behavior is the _____.
 - a. representative survey
 - b. controlled case study
 - c. laboratory observation
 - d. experiment

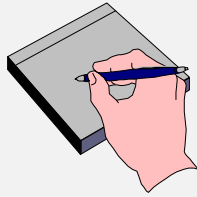
12. The relationship between the color of your shoes and your teacher's mood today can be called a _____.
 - a. spurious correlation
 - b. zero correlation
 - c. random sampling
 - d. negative correlation

Study and Review Guide

13. Sometimes _____ is used in order to create a realistic situation with genuine reactions from participants.
- trickery
 - deception
 - a nonmonetary incentive
 - case observation
14. The explanation a research provides to participants about the research process when it is over is called a(n) _____.
- case conference
 - study's footnote
 - debriefing
 - exit interview
15. With regard to animal studies in psychology, the use of aversive treatment such as electrical shock is _____.
- extremely rare
 - common for species that do not feel pain
 - banned by animal care committees
 - acceptable only if pain medication is provided
16. Which of the following terms are properly matched?
- psychoanalysis and uniqueness
 - Gestalt and wholeness
 - functionalism and unconscious conflict
 - psychobiology and introspection
17. Observable behaviors are the primary focus in which of the following approaches to psychology?
- humanistic
 - psychodynamic
 - behaviorism
 - cognitive
18. Someone who believes that behavior is the result of complex chemical and biological events within the brain is called a(n) _____.
- information processor
 - ecological psychologist
 - evolutionary psychologist
 - psychobiologist

Study and Review Guide

19. A _____ emphasizes the common evolutionary history of all people and studies the biological bases of social behavior.
- ethologist
 - ethnologist
 - sociobiologist
 - psychobiologist
20. The induction of alternate states of consciousness is a _____.
- cultural universal
 - practice found only in Western cultures
 - universal practice amongst adolescents, but not adults
 - relatively new practice in the history of mankind



ANSWERS

The following answers to active learning exercises, fill-ins, matching exercises, and practice tests 1 and 2 provide immediate feedback on your mastery of the material. Try not to simply memorize the answers. When you are unsure of your “guess” or make an error, be sure to go back to the textbook and carefully review. This will greatly improve your scores on classroom exams and quizzes.

ACTIVE LEARNING EXERCISE I

Study I correlational, positive correlation; **Study II** experimental, IV = MSG or placebo, DV = symptoms of sickness; **Study III** correlational, positive

ACTIVE LEARNING EXERCISE III

1. SB 2. CG 3. EB

FILL-IN EXERCISES

1. scientific study of behavior and mental processes; 2. describe, explain, predict, and change; 3. theoretical questions, answer real-world questions; 4. experimental; 5. Independent variable; 6. sample bias; 7. debrief; 8. psychoanalytic; 9. Humanistic psychology; 10. survey, question, read, recite, review, and wRite.

MATCHING EXERCISES

a. 9, b. 3, c. 8, d. 7, e. 1, f. 6, g. 10, h. 5, i. 2, j. 4

Study and Review Guide

<u>PRACTICE TEST I</u>		<u>PRACTICE TEST II</u>	
1. b (p. 5)	11. a (p. 15)	1. a (p. 4)	11. d (p. 19)
2. b (p. 5)	12. b (p. 15)	2. b (p. 5)	12. b (p. 20)
3. d (p. 6)	13. b (p. 17)	3. b (pp. 6-8)	13. b (p. 24)
4. a (p. 7)	14. b (p. 28)	4. a (p. 8)	14. c (p. 24)
5. b (p. 15)	15. d (p. 28)	5. d (p. 11)	15. a (p. 24)
6. c (pp. 11, 21)	16. b (p. 28)	6. a (p. 11)	16. b (p. 27)
7. c (p. 11)	17. a (p. 29)	7. b (p. 12)	17. c (p. 30)
8. d (p. 13)	18. b (p. 29)	8. c (p. 15)	18. d (p. 31)
9. b (p. 12)	19. c (p. 30)	9. b (p. 15)	19. c (p. 32)
10.a (p. 13)	20. d (p. 31)	10. a (p. 17)	20. a (p. 34)

Chapter

2

The Biological Bases of Behavior

OUTLINE (Survey & Question)

This outline is intended to help you *survey* the chapter. As you read through the various sections, write down any *questions* or comments that come to mind in the space provided. This is a valuable part of active learning and the SQ4R method. It not only makes your reading time more enjoyable and active, but it also increases your retention and understanding of the material.

TOPIC

NOTES

I. THE NEURON

- A. Structure of a Neuron: Three Basic Parts

- B. Resting Potential and Action Potential: To Transmit or Not to Transmit, That Is the Question

II. CHEMICAL MESSENGERS

- A. Nervous System Messengers: Neurotransmitters

- B. Research Highlight: The Search for Better Painkillers

- C. Endocrine System Messengers: Hormones

D. The Hypothalamus

III. THE PERIPHERAL NERVOUS SYSTEM

A. The Somatic Nervous System: A Network for Sensory and Motor Messages

B. The Autonomic Nervous System: Preparing for Fight or Flight

IV. THE CENTRAL NERVOUS SYSTEM

A. The Spinal Cord: The Link Between the Brain and the Body

B. The Brain: The Body's Control Center

C. Gender and Cultural Diversity: Sexual Orientation and the Hypothalamus

D. Gender and Cultural Diversity: Male and Female Differences in the Brain

V. STUDYING THE BRAIN

A. Active Learning: Understanding Brain Anatomy and Function

B. Anatomical Studies: From Cadavers to Computers

C. Lesion Techniques: Studying the Brain Through Systematic Deactivation

D. Electrical Recording: Measuring Electrical Changes in the Brain

E. Electrical Stimulation: Eliciting Brain Activity

F. Split-Brain Research: Two Brains Rather Than One

G. CAT, PET, and MRI: Techniques That Scan the Brain



LEARNING OBJECTIVES (Read, Recite & wRite)

While *reading* the chapter, stop periodically and *recite* (or repeat in your own words) the answers to the following learning objectives. It will also help your retention if you *write* your answer in the space provided. (Page numbers refer to the text Psychology in Action, 5th Ed.)

1. Define the two major divisions of the nervous system (p. 48).
2. Draw a neuron, label its parts, and describe the function of each part (pp. 48-49).
3. Describe the electrochemical process that changes a resting potential into an action potential, and explain the purpose of the sodium-potassium pump (pp. 49-53).
4. Define neurotransmitter and explain how neurotransmitters act to excite or inhibit action potentials (pp. 53-54).
5. Briefly explain how psychoactive drugs affect the synapse; describe the problems associated with morphine as a painkiller, and outline the scientific search for a new painkiller (pp. 55-56).

6. Describe the endocrine system and its major functions. Discuss the role of the hypothalamus within the endocrine system, and the concept of homeostasis (pp. 56-58).
7. List and describe the functions of the two major subdivisions of the peripheral nervous system (PNS); explain the differences between an afferent and efferent pathway; and describe the interactions between and functions of the parasympathetic and sympathetic nervous systems (pp. 59-62).
8. List the two major subdivisions of the central nervous system (CNS) and describe the functions of the spinal cord (pp. 63-65).
9. Describe the cerebral cortex; identify the location of the four cortical lobes, and describe the functions of each lobe; identify the location of, and describe the function of each of the following cortical areas: motor control, association, projection, Broca's, and Wernicke's (pp. 66-69).
10. Identify the location of the subcortical areas of the brain and describe the functions of each part (corpus callosum, thalamus, hypothalamus, and limbic system); identify the parts of the limbic system involved with memory, aggression, and fear. Describe LeVay's research regarding the brain and sexual orientation (pp. 69-73).
11. Identify the location of the cerebellum and the parts of the brain stem (pons, medulla, and reticular activating system); describe the functions of each of these parts of the brain (pp. 73-74).
12. Describe how male and female brains differ, including tasks that generally favor females and tasks that generally favor males (pp. 75-79).
13. Describe and explain the use of the following brain research techniques: anatomical dissection, lesion techniques, electrical recording, electrical stimulation, split-brain research, CAT, PET, and MRI (pp. 77-79, 81-83).

14. Describe the specialized and interdependent functions of the brain's left and right hemispheres (pp. 80-81).



KEY TERMS (Review)

The *review* step in the SQ4R method is very important to your performance on quizzes and exams. Upon completion of this chapter, you should be able to define the following terms.

Action Potential: _____

Afferent: _____

All-or-Nothing Principle: _____

Association Areas: _____

Autonomic Nervous System (ANS): _____

Axon: _____

Axon Terminal Buttons: _____

Brain: _____

Study and Review Guide

Brain Stem: _____

Broca's Area: _____

CAT (Computerized Axial Tomography) Scan: _____

Central Nervous System (CNS): _____

Cerebellum: _____

Cerebral Cortex: _____

Corpus Callosum: _____

Dendrites: _____

Dyslexia: _____

Efferent: _____

Electrodes: _____

Study and Review Guide

Electroencephalogram (EEG): _____

Endocrine System: _____

Frontal Lobes: _____

Homeostasis: _____

Hormones: _____

Hypothalamus: _____

Ions: _____

Lesion Technique: _____

Limbic System: _____

Medulla: _____

Motor Control Area: _____

Study and Review Guide

MRI (Magnetic Resonance Imaging): _____

Myelin: _____

Nerve: _____

Neurons: _____

Neurotransmitters: _____

Occipital Lobes: _____

Parasympathetic Nervous System: _____

Parietal Lobes: _____

Peripheral Nervous System (PNS): _____

PET (Positron Emission Tomography) Scan: _____

Pons: _____

Study and Review Guide

Projection Areas: _____

Psychoactive Drugs: _____

Reflex Arc: _____

Reflexes: _____

Resting Potential: _____

Reticular Activating System (RAS): _____

Sodium-Potassium Pump: _____

Soma: _____

Somatic Nervous System (SNS): _____

Spinal Cord: _____

Sympathetic Nervous System: _____

Synapse: _____

Temporal Lobes: _____

Thalamus: _____

Wernicke's Area: _____



ACTIVE LEARNING EXERCISES (Recite)

The *recite* step in the SQ4R method requires you to be an ACTIVE learner. By completing the following exercises, you will test and improve your mastery of the chapter material, which will also improve your performance on quizzes and exams. Answers to some exercises appear at the end of this study guide chapter.

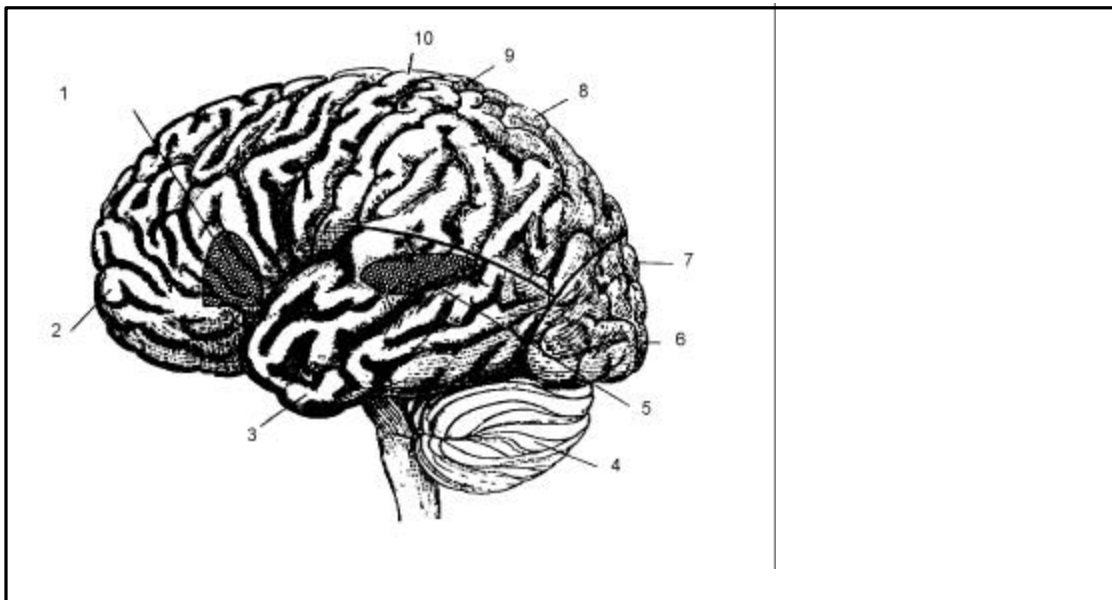
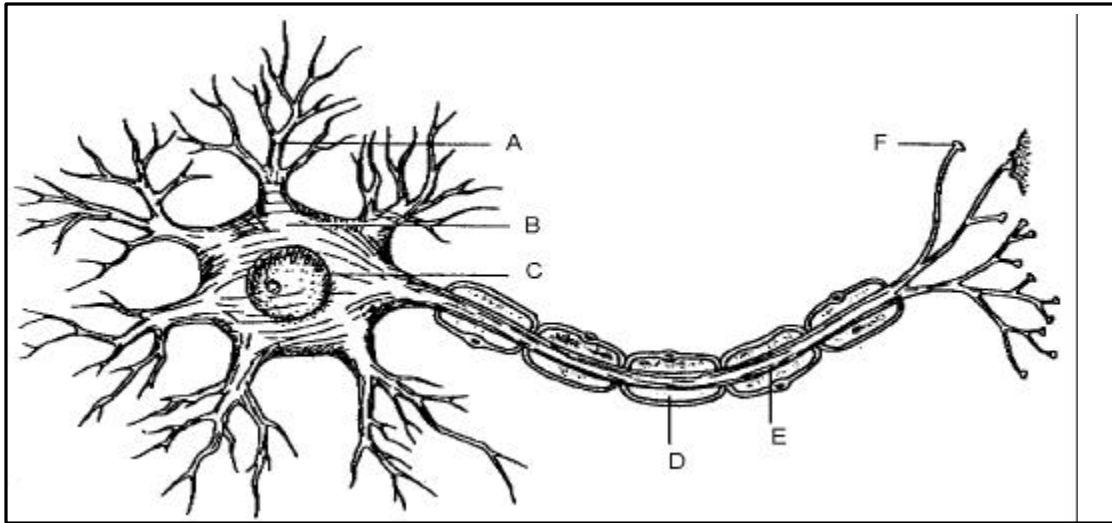
ACTIVE LEARNING EXERCISE I

For each of the following behaviors, identify which of the sensory projection areas would receive incoming neural impulses. Write down the cerebral lobes receiving the input (frontal, parietal, occipital, or temporal).

1. Looking at a picture _____.
2. Feeling a rough texture with your right hand _____.
3. Listening to music on headphones _____.
4. Catching a baseball with your left hand _____.
5. Reading silently _____.

ACTIVE LEARNING EXERCISE II

Using information from Chapter 2, fill in the appropriate label or term in the space next to the corresponding number or letter.



ACTIVE LEARNING EXERCISE III

Clarifying Terms and Concepts (A Cognitive Skill)

An important element of active learning and critical thinking is clarity of thought. A clear thinker understands that simply defining a term is not evidence of true understanding. One must be able to extend basic definitions to higher, more complex applications. The following exercise will help clarify your understanding of brain terminology and function.

The Setting

You are a famous neurosurgeon who specializes in brain damage. In each of the following cases, make a "diagnosis" (using information from Chapter 2).

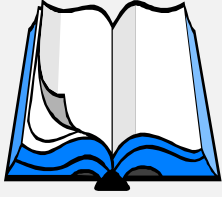
Case 1: A 56-year-old female has suffered a recent stroke. She speaks in a curious manner resembling fluent English but the phrases make no sense. You find that she comprehends your verbal or written instructions perfectly and can even write them down, but cannot repeat them verbally. You diagnose the problem as a lesion in the _____.

Case 2: A 7-year-old boy is having serious difficulties learning to read. At age 5, his corpus callosum was sectioned to prevent epileptic seizures. His mother points out that he is very intelligent and she cannot understand why reading is so difficult for him. You explain that his reading difficulties are probably related to the fact that _____.

Case 3: An intelligent businessman comes to you and explains rather agitatedly that he awoke yesterday morning to find, much to his dismay, that he could no longer read. Your tests determine the following:

1. He is totally blind in the right visual field.
2. He speaks fluently and comprehends speech.
3. He can write with his right hand but cannot read what he has written.
4. He can copy written words but only with his left hand.

You turn to your puzzled assistant and remark that this is indeed a tough one, but you are willing to bet you will find brain damage in at least two areas, which are the _____ and _____.



CHAPTER OVERVIEW (Review)

The following CHAPTER OVERVIEW provides a narrative overview of the main topics covered in the chapter. Like the Visual Summary found at the end of each chapter in the text, this narrative summary provides a final opportunity to review chapter material.

I. Neurons *Neurons are cells that transmit information throughout the body. They have three main parts: dendrites, which receive information from other neurons; the soma, or cell body; and the axon, which sends neural information. At the end of the axon are small structures called axon terminal buttons that release chemicals called neurotransmitters.*

The axon is specialized for transmitting neural impulses, or action potentials. During times when no action potential is moving down the axon, the axon is at rest. The resting potential gives way to the action potential when a stimulus causes sodium and potassium ions to move across the axon membrane. Action potentials travel more quickly down myelinated axons.

II. Chemical Messengers *Information is transferred from one neuron to another at synapses by chemicals called neurotransmitters. Neurotransmitters bind to receptor sites much as a key fits into a lock, and their effects can be excitatory or inhibitory. Most psychoactive drugs act on the nervous system by increasing or decreasing the amount of neurotransmitter that crosses the synapse.*

Closely associated with the nervous system is the endocrine system, which is composed of glands that release hormones into the bloodstream. Hormones regulate levels of critical chemicals in the body. The major link between the endocrine and nervous systems is the hypothalamus.

III. The Peripheral Nervous System *The peripheral nervous system includes all nerves going to and from the brain and spinal cord. Its two major subdivisions are the somatic nervous system and the autonomic nervous system.*

The somatic nervous system includes all nerves carrying afferent (incoming) sensory information and efferent (outgoing) motor information to and from the sense organs and skeletal muscles.

The autonomic nervous system includes those nerves outside the brain and spinal cord that maintain normal functioning of glands, heart muscle, and the smooth muscle of blood vessels and internal organs. The autonomic nervous system is further divided into two branches, the parasympathetic and the sympathetic, which tend to work in opposition to one another.

The parasympathetic nervous system normally dominates when a person is relaxed and not under any physical or mental stress. Its main functions are to slow the heart rate, lower blood pressure, and increase digestion and elimination.

The sympathetic nervous system dominates when a person is under physical or mental stress. It increases heart rate and blood pressure and slows digestive processes, mobilizing the body for fight or flight.

IV. The Central Nervous System *The central nervous system is composed of the brain and the spinal cord. The spinal cord is the communications link between the brain and the rest of the body below the neck. It is involved in all voluntary and reflex responses of the body below the neck.*

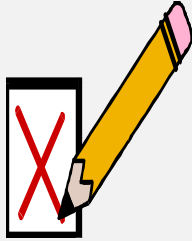
The major divisions of the brain are the cerebral cortex, the subcortical areas, the cerebellum, and the brain stem. The cerebral cortex is divided into four lobes. The frontal lobes control movement and speech, and are involved with self-awareness and planning ahead. The parietal lobes are the receiving area for sensory information. The occipital lobes are dedicated to vision and visual information processing. The temporal lobes are concerned with hearing and language.

The most important structures in the subcortex are the corpus callosum, the thalamus, the hypothalamus, and the limbic system. The corpus callosum is a connecting bridge of axons between the two cerebral hemispheres. The thalamus is the major incoming sensory relay area of the brain. The hypothalamus regulates the endocrine system and body temperature, thirst, hunger, sex, and aggression. The limbic system is a group of brain structures involved with emotional behavior.

Research shows relationships between hypothalamus, gender, and sexual orientation, but we do not know what is cause and what is effect. Recent research also seems to indicate that male and female differences may ultimately stem from early hormonal influence and anatomical differences in brain structure. The cerebellum, located at the base of the brain behind the brain stem, is responsible for smooth movement and coordinated motor activity. The brain stem is composed of the pons, the medulla, and the reticular activating system (RAS). The pons is involved with respiration, movement, facial expression, and sleep. The medulla mainly functions to control respiration. The RAS is a diffuse set of neurons associated with attention and arousal.

V. Studying the Brain *Anatomical research techniques refer to studying the brain's structure through direct observation with cadavers or slide studies of brain tissue. Lesion techniques involve destroying part of an animal's brain to study resultant changes in behavior. Electrical recording techniques involve implanting electrodes into the brain or on its surface to study the brain's electrical activity. Electrical stimulation techniques allow researchers to activate neurons in a particular area of the brain. Split-brain research is conducted with patients who have had their corpus callosum severed. Split-brain research suggests that the left hemisphere is specialized for language and analytical functions and the right hemisphere, for nonverbal abilities, including musical abilities and perceptual and spatio-manipulative skills. CAT, PET, and MRI scans are sophisticated techniques for studying intact, living brains.*

SELF-TESTS (Review & write)



Completing the following SELF-TESTS will provide immediate feedback on how well you have mastered the material. In the *fill-in exercises*, write the appropriate word or words in the blank spaces. The *matching exercise* requires you to match the terms in one column to their correct definitions in the other. For the *multiple-choice questions* in Practice Tests I and II, circle or underline the correct answer. When you are unsure of any answer, be sure to highlight or specially mark the item and then go back to the text for further review. Correct answers are provided at the end of this study guide chapter.

FILL-IN EXERCISES

1. The two major divisions of the nervous system are the _____, which consists of the brain and spinal cord, and the _____, which consists of all nerves in the body outside the CNS (p. 48).
2. The major ions involved in the action and resting potential are the _____ and _____ (p. 50).
3. The fatty insulation on some axons that helps increase the speed of the action potential is known as _____ (p. 51).
4. Most psychoactive drugs have their effect at the _____ (p. 55).
5. The _____ part of the autonomic nervous system is dominant during normal, relaxed times, while the _____ is dominant during times of mental or physical stress (p. 60).
6. The _____ is involved in reflexes and relaying neural information to and from the brain (p. 63).
7. The _____ lobes are dedicated almost entirely to vision and visual perception (p. 68).
8. The _____ is an interconnected group of subcortical structures involved with memory and many types of emotional behavior, particularly fear and aggression (p. 71).
9. The structure that serves as a filter for incoming sensory information and is also important for attention and arousal is the _____ (p. 74).
10. Specialization of the hemispheres of the brain was first discovered as a result of _____ (p. 80).

MATCHING EXERCISE

Reviewing Neuron Related Terminology

Column A

- a. Neuron
- b. Resting Potential
- c. Myelin
- d. Nerve
- e. Soma
- f. Sodium-Potassium Pump
- g. Axons
- h. Action Potential
- i. Axon Terminal Buttons
- j. Dendrites

Column B

- 1. ____ Receive information from other neurons.
- 2. ____ Integrates incoming information from dendrites.
- 3. ____ Release chemicals called neurotransmitters.
- 4. ____ Electrochemical impulse that travels down the axon.
- 5. ____ Resting state of the axon membrane.
- 6. ____ Sodium pumped out of axon and potassium moves in.
- 7. ____ Cells that transmit information throughout the body.
- 8. ____ A bundle of axons from many neurons.
- 9. ____ Fatty insulation that speeds up action potential.
- 10. ____ Specialized for transmitting action potentials.

PRACTICE TEST I

1. Cells within your body specialized for conducting information are called _____.
 - a. dendrites
 - b. neurons
 - c. axons
 - d. nucleotides
2. The three major parts of a neuron are the _____.
 - a. glia, dendrites, and myelin
 - b. myelin, dendrites, and axon
 - c. dendrites, axon, and soma
 - d. axon, glia, and myelin
3. An action potential travels along a myelinated axon about _____ times faster than along a bare axon.
 - a. 10
 - b. 30
 - c. 100
 - d. 300
4. The major ions involved in the resting and action potential are _____.
 - a. sodium and hydrogen
 - b. hydrogen and potassium
 - c. DNA and RNA
 - d. potassium and sodium

Study and Review Guide

5. Myelin, the fatty insulation surrounding the axon, is required for _____.
 - a. complex cognitive tasks
 - b. complex motor tasks
 - c. increasing the speed of the action potential
 - d. all of these options

6. The synapse is the point where _____.
 - a. the soma attaches to the dendrite
 - b. neurotransmitters are manufactured
 - c. information transfers from neuron to neuron
 - d. the action potential begins

7. Chemical messengers that are secreted into the synapse by axon terminal buttons are called _____.
 - a. ions
 - b. neurotransmitters
 - c. nucleotides
 - d. neurocommunicators

8. The principle whereby an axon either fires or does not fire an action potential is called the _____.
 - a. sodium-potassium principle
 - b. axon terminal principle
 - c. shotgun principle
 - d. all-or-nothing principle

9. The somatic nervous system includes all incoming _____ nerves and all outgoing _____ nerves.
 - a. central, peripheral
 - b. afferent, efferent
 - c. peripheral, central
 - d. efferent, afferent

10. The parasympathetic and sympathetic are the major divisions of the _____ nervous system.
 - a. autonomic
 - b. somatic
 - c. central
 - d. automatic

11. The parasympathetic nervous system is dominant when a person is _____.
 - a. stressed
 - b. relaxed
 - c. frightened
 - d. angry

Study and Review Guide

12. The system of glands that secrete hormones into the bloodstream is called the _____ system.
 - a. lymphatic
 - b. hormonal
 - c. endocrine
 - d. reticular activating

13. The major divisions of the central nervous system are _____.
 - a. sympathetic and parasympathetic
 - b. somatic and autonomic
 - c. gray matter and white matter
 - d. brain and spinal cord

14. The frontal, parietal, occipital, and temporal lobes make up the _____.
 - a. brain
 - b. cerebral cortex
 - c. subcortex
 - d. brain stem

15. If you are accidentally hit on the head and you see flashes of light, most likely the blow activated cells in the _____.
 - a. frontal lobes
 - b. temporal lobes
 - c. occipital lobes
 - d. parietal lobes

16. The corpus callosum, the thalamus, and the hypothalamus are all _____.
 - a. subcortical areas
 - b. cortical areas
 - c. brain stem areas
 - d. spinal cord areas

17. Damage to the medulla can lead to loss of _____.
 - a. vision
 - b. respiration
 - c. hearing
 - d. smell

18. Split-brain research has indicated that, in most people, the left hemisphere is responsible for _____ abilities.
 - a. musical
 - b. spatial
 - c. artistic
 - d. mathematical

19. The control of voluntary movement is found in the _____.
a. spinal cord
b. frontal lobes
c. subcortex
d. brain stem
20. The three main brain scans discussed in the text are the _____.
a. CAT, DOG, RAN
b. PET, CAT, MRI
c. BW, LEF, SS
d. KSU, HSU, CSU

PRACTICE TEST II

1. Neurons are the basic units in the _____.
a. nervous system
b. synapses
c. dendrites
d. body
2. The _____ integrates incoming information, absorbs nutrients, and produces proteins necessary for the functioning of the neuron.
a. axon hillock
b. myelin sheath
c. synaptic gap
d. soma
3. An action potential is a(n) _____ impulse that travels through a neuron.
a. ganglial
b. muscular
c. electrochemical
d. neuroelectrical
4. A nerve is composed of _____.
a. myelin covered dendrites
b. ganglial tissue
c. a bundle of axons from many neurons
d. somas
5. Neurotransmitters are _____.
a. charged ions that carry action potentials down the axon
b. hormones that pass electrical energy from the dendrite into the soma
c. chemical messengers that are released from an axon and stimulate dendrites on another neuron
d. lubricants and nutrients needed by the soma to keep the neuron alive

Study and Review Guide

6. Morphine prevents pain perception in the brain by _____ action potentials.
 - a. speeding up
 - b. blocking
 - c. slowing down
 - d. mimicking

7. Homeostasis occurs when body chemicals are _____.
 - a. in a steady state
 - b. plentiful
 - c. scarce
 - d. at moderate levels

8. The hypothalamus is sometimes called the _____ because it regulates many bodily and psychological functions.
 - a. self-regulator
 - b. homeostatic controller
 - c. functional activator
 - d. master endocrine gland

9. Which of the paired words below shows the same relationship as the words in the following pair?
afferent message : sensory message ::
 - a. outgoing : incoming
 - b. efferent message : motor message
 - c. sensory message : perceptual message
 - d. pain message : pleasure message

10. The sensory and motor nerves that go to and from the central nervous system, body organs, and skeletal muscles make up the _____ nervous system.
 - a. somatic
 - b. fight or flight
 - c. autonomic
 - d. peripheral

11. The _____ system prepares your body to respond to stress.
 - a. central nervous
 - b. fight or flight
 - c. peripheral
 - d. somatic

12. A reflex arc occurs in the _____.
 - a. skeletal muscles
 - b. brain
 - c. spinal cord
 - d. reticular activating system

Study and Review Guide

13. A stroke that damages Wernicke's area would affect a person's ability to _____.
 - a. make speech sounds
 - b. read and write
 - c. understand language
 - d. read, write, and understand language

14. With regard to taking this test, the association areas of your brain are most involved in _____.
 - a. holding your book or writing instrument
 - b. thinking about and planning your answers
 - c. seeing the written words
 - d. vocalizing the words to yourself

15. The occipital lobes contain the sensory projection areas for _____.
 - a. vision
 - b. hearing
 - c. smell and taste
 - d. touch and pain

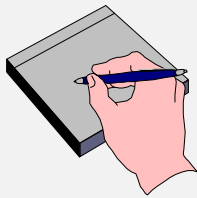
16. The corpus callosum _____.
 - a. maintains your balance
 - b. keeps you breathing
 - c. connects your right and left cerebral hemispheres
 - d. is the center of your personality

17. The limbic system is involved with your _____.
 - a. ability to move and maintain posture
 - b. sense of touch and pain
 - c. basic bodily functions
 - d. emotional behavior

18. Dr. LeVay found that the anterior hypothalamus was _____ in heterosexual men, compared to homosexual men and heterosexual women.
 - a. twice as large
 - b. smaller
 - c. more densely packed with neurons
 - d. the same size but weighed less

19. In the lesion technique for studying the brain, brain tissue is _____.
 - a. replaced
 - b. destroyed
 - c. destroyed, then replaced
 - d. injected with chemicals

20. Split-brain patients _____.
a. do not exist
b. have split personalities
c. cannot name an object if they hold it in their left hand without looking at it
d. deteriorate gradually at first, then faster, and usually die within a year



ANSWERS

The following answers to active learning exercises, fill-ins, matching exercises, and practice tests 1 and 2 provide immediate feedback on your mastery of the material. Try not to simply memorize the answers. When you are unsure of your “guess” or make an error, be sure to go back to the textbook and carefully review. This will greatly improve your scores on classroom exams and quizzes.

ACTIVE LEARNING EXERCISE I

1. right and left occipital lobes; 2. left parietal lobe; 3. left and right temporal lobes; 4. right frontal lobe; 5. vision = left and right occipital lobes, language processing = left parietal lobe.

ACTIVE LEARNING EXERCISE II

Neuron Drawing a. dendrite, b. soma (cell body), c. nucleus, d. myelin sheath, e. axon, f. axon terminal button.

Brain Drawing 1. Broca’s area, 2. frontal lobe, 3. temporal lobe, 4. cerebellum, 5. Wernicke’s area, 6. occipital lobe, 7. visual cortex, 8. parietal lobe, 9. sensory projection area, 10. motor control area.

ACTIVE LEARNING EXERCISE III

Case 1: Left hemisphere, in the frontal and temporal lobes, probably Broca's area.

Case 2: He had his corpus callosum severed, and his frontal, temporal, and occipital lobes are not integrating information.

Case 3: Left occipital lobe, corpus callosum.

FILL-IN EXERCISES

1. central nervous system, peripheral nervous system; 2. sodium, potassium; 3. myelin; 4. synapse; 5. parasympathetic, sympathetic; 6. spinal cord; 7. occipital; 8. limbic system; 9. reticular activating system (RAS); 10. split-brain operations.

MATCHING EXERCISES

a. 7, b. 5, c. 9, d. 8, e. 2, f. 6, g. 10, h. 4, i. 3, j. 1

<u>PRACTICE TEST I</u>		<u>PRACTICE TEST II</u>	
1. b (p. 48)	11. b (p. 60)	1. a (p. 48)	11. b (p. 60)
2. c (p. 48)	12. c (p. 56)	2. d (p. 48)	12. c (pp. 64-65)
3. a (p. 51)	13. d (p. 63)	3. c (p. 48)	13. d (p. 64)
4. d (p. 50)	14. b (p. 66)	4. c (p. 49)	14. b (p. 67)
5. d (pp. 51, 53)	15. c (p. 68)	5. c (p. 53)	15. a (p. 68)
6. c (p. 53)	16. a (p. 69)	6. b (p. 56)	16. c (p. 70)
7. b (p. 53)	17. b (p. 74)	7. a (p. 57)	17. d (p. 71)
8. d (p. 54)	18. d (p. 80)	8. d (pp. 57-58)	18. a (pp. 72-73)
9. b (p. 59)	19. b (p. 67)	9. b (p. 59)	19. b (p. 79)
10.a (p. 60)	20. b (p. 81)	10. a (pp. 59-60)	20. c (pp. 80-81)

Chapter

3

Sensation and
Perception

OUTLINE (Survey & Question)

This outline is intended to help you *survey* the chapter. As you read through the various sections, write down any *questions* or comments that come to mind in the space provided. This is a valuable part of active learning and the SQ4R method. It not only makes your reading time more enjoyable and active, but it also increases your retention and understanding of the material.

TOPIC

NOTES

I. EXPERIENCING SENSATIONS

- A. Sensory Thresholds: Testing the Limits and Changes
- B. Sensory Adaptation: Weakening the Response

II. VISION

- A. Light: Electromagnetic Energy
- B. The Eye: The Anatomy of Vision

III. THE OTHER SENSES

- A. Hearing: A Sound Sensation

- B. Research Highlight:
Tracking Down the Genes for Deafness

- C. Smell and Taste: Sensing Chemicals

- D. Gender and Cultural Diversity:
Do Some People Smell Better than Others?

- E. The Body Senses: More Than Just Touch

IV. PERCEPTION

V. SELECTION

- A. Physiological Factors: Biological Influences on Selection

- B. Stimulus Factors: Environmental Influences on Selection

- C. Psychological Factors: Intrapsychic Influences on Selection

VI. ORGANIZATION

- A. Form Perception: Organizing Stimuli into Patterns or Shapes

- B. Gender and Cultural Diversity: Are the Gestalt Laws Universally True?
- C. Perceptual Constancies: Stabilizing a Changing World
- D. Depth Perception: Seeing the World as Three Dimensional
- E. Color Perception: Discriminating among Hues

VII. INTERPRETATION

- A. Research Highlight: Early Life Experiences:
- B. Perceptual Expectancy: The Effects of Prior Experience
- C. Other Influences on Interpretation: Personal Motivations and Frames of Reference
- D. Extrasensory Perception: Strange But Not True
- E. ESP Research
- F. Active Learning: Problems with Believing in ESP



LEARNING OBJECTIVES (Read, Recite & wRite)

While *reading* the chapter, stop periodically and *recite* (or repeat in your own words) the answers to the following learning objectives. It will also help your retention if you *write* your answer in the space provided. (Page numbers refer to the text Psychology in Action, 5th Ed.)

1. Define sensation and perception (p. 88).
2. Explain transduction, reduction, and coding in sensory processing (pp. 88-89).
3. Describe the absolute and difference thresholds and the importance of sensory adaptation (pp. 90- 91).
4. Describe the physical properties of light and light waves (p. 92).
5. Draw a diagram of the eye, label the major parts, and explain how each part contributes to the visual process (pp. 93-95).
6. Explain dark and light adaptation (p. 96).
7. Describe the physical properties of sound and sound waves (p. 96-97).
8. Draw a diagram of the ear, label the major parts, and explain how each part contributes to the auditory process (pp. 97-98).

Study and Review Guide

9. Explain place and frequency theories with regard to the detection of pitch and loudness (pp. 98-99).
10. Describe the causes of nerve deafness and current research into genetically caused deafness; briefly describe three ways to prevent nerve deafness (p. 99).
11. Describe the sense of smell, including basic anatomy, the lock-and-key theory of olfaction, gender, developmental, and cultural differences in olfaction, and the role of pheromones in animals and humans (pp. 100-102).
12. Describe the sense of taste, including basic anatomy, how it works, and the causes of "picky" eating (pp. 102-103).
13. List and describe the general functions of the three body senses (p. 103).
14. Describe the skin senses and their functions. Explain the role of endorphins and the gate-control theory in the perception of pain (pp. 103-104).
15. Explain how the vestibular and kinesthetic senses provide information about the body (pp. 105-107).
16. Differentiate perception from sensation, and explain illusions (p. 107).
17. Describe the role of selection in the process of perception, and define selective attention. Describe the physiological, stimulus, and psychological factors that influence selection (pp. 108-110).

Study and Review Guide

18. Discuss the research on subliminal perception (pp. 110-111).
19. List and discuss the Gestalt principles of perceptual organization. Describe cross-cultural research on the universality of these principles (pp. 111-114).
20. Explain the concept of perceptual constancy as it relates to size, shape, color, and brightness (pp. 114-116).
21. Explain how a person perceives depth, and describe both binocular and monocular depth cues (pp. 117-122).
22. Discuss how both the trichromatic and opponent-process theories are needed to explain how humans perceive color (pp. 122-124).
23. Describe how prior experience, personal motivations, and frames of reference influence perceptual interpretation (pp. 125-127).
24. Describe the different types of extrasensory perception; discuss the criticisms regarding ESP research; explain why people continue to believe in ESP; and discuss how four types of faulty reasoning perpetuate ESP beliefs (pp. 127-129).



KEY TERMS (Review)

The *review* step in the SQ4R method is very important to your performance on quizzes and exams. Upon completion of this chapter, you should be able to define the following terms.

Absolute Threshold: _____

Accommodation: _____

Aerial Perspective: _____

Amplitude: _____

Aqueous Humor: _____

Audition: _____

Auditory Canal: _____

Auditory Nerve: _____

Study and Review Guide

Basilar Membrane: _____

Blind Spot: _____

Body Senses: _____

Brightness Constancy: _____

Ciliary Muscles: _____

Closure: _____

Cochlea: _____

Coding: _____

Color Aftereffects: _____

Color Constancy: _____

Cones: _____

Study and Review Guide

Constancy: _____

Contiguity: _____

Continuity: _____

Convergence: _____

Cornea: _____

Dark Adaptation: _____

Depth Perception: _____

Difference Threshold: _____

Eardrum (Tympanic Membrane): _____

Electromagnetic Spectrum: _____

Study and Review Guide

Empiricist: _____

Endorphins: _____

Extrasensory Perception (ESP): _____

Feature Detectors: _____

Figure and Ground: _____

Fovea: _____

Frequency: _____

Frequency Theory: _____

Gate-Control Theory of Pain: _____

Gestalt: _____

Gustation: _____

Study and Review Guide

Habituation: _____

Hair Cells: _____

Hue: _____

Illusion: _____

Incus: _____

Interposition: _____

Iris: _____

Kinesthesia: _____

Lens: _____

Light Adaptation: _____

Study and Review Guide

Light and Shadow: _____

Linear Perspective: _____

Lock-and-Key Theory of Olfaction: _____

Malleus: _____

Motion Parallax: _____

Nativist: _____

Olfaction: _____

Opponent-Process Theory: _____

Optic Nerve: _____

Oval Window: _____

Papillae: _____

Study and Review Guide

Perception: _____

Pheromones: _____

Photoreceptors: _____

Pinna: _____

Pitch: _____

Place Theory: _____

Proximity: _____

Pupil: _____

Receptors: _____

Relative Size: _____

Study and Review Guide

Retina: _____

Retinal Disparity: _____

Reversible Figure: _____

Rods: _____

Sclera: _____

Selective Attention: _____

Semicircular Canals: _____

Sensation: _____

Sensory Adaptation: _____

Shape Constancy: _____

Similarity: _____

Study and Review Guide

Size Constancy: _____

Skin Senses: _____

Sound Waves: _____

Stapes: _____

Stereoscopic Vision: _____

Subliminal: _____

Texture Gradients: _____

Transduction: _____

Trichromatic Theory: _____

Vestibular Sacs: _____

Study and Review Guide

Vestibular Sense: _____

Vitreous Humor: _____

Wavelength: _____

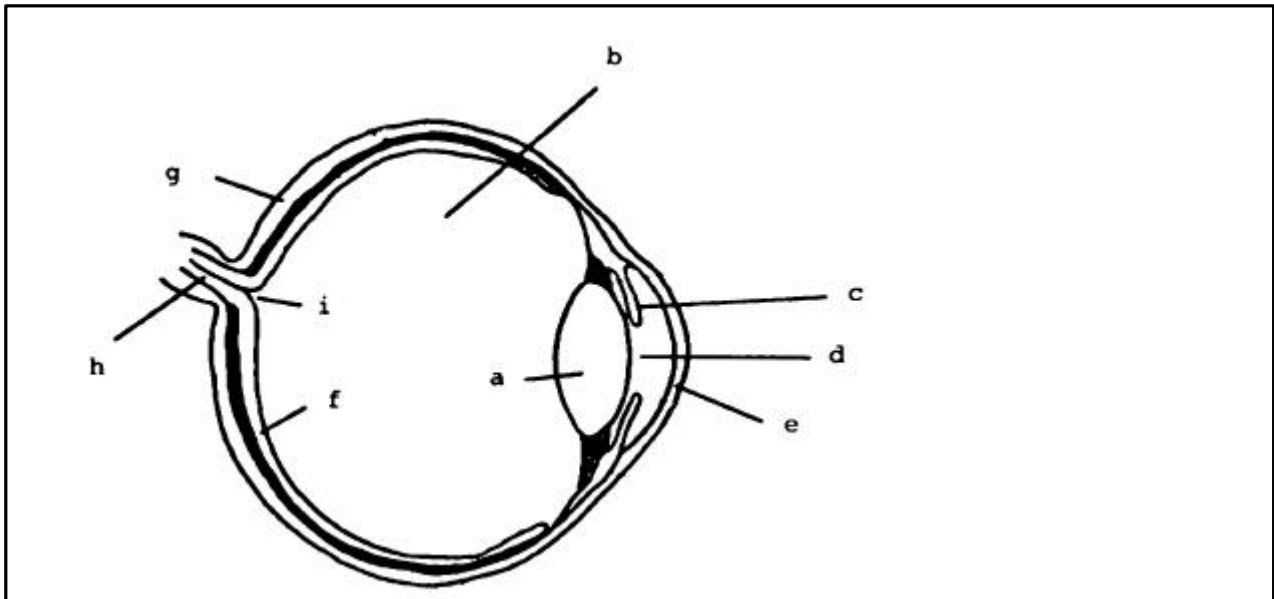


ACTIVE LEARNING EXERCISES (Recite)

The *recite* step in the SQ4R method requires you to be an ACTIVE learner. By completing the following exercises, you will test and improve your mastery of the chapter material, which will also improve your performance on quizzes and exams. Answers to some exercises appear at the end of this study guide chapter.

ACTIVE LEARNING EXERCISE I

In the blank space next to each letter, write the name of the eye structure that corresponds to the letter in the diagram.



ACTIVE LEARNING EXERCISE II

Auditory Perception

Have you noticed that music often sounds better when it is played loudly, but not to the point that it hurts your ears? This is primarily because very high and very low frequencies are not perceived as well at a low volume. The music sounds “flat.”

Study and Review Guide

To try this yourself, find a stereo system with separate bass and treble controls and a “loudness” button. Set the bass and treble controls to their middle position, while making sure the “loudness” button is off.

Now choose your favorite music, turn on the stereo, and then increase the volume until the music sounds best to you. (Be careful not to overdo the volume. As you discovered in the text, loud noises can permanently damage your hearing.) Try decreasing the volume. The music should begin to seem “flat” or not as pleasing as before. Experiment with increasing only the low or high bass and treble. Turn on the “loudness” button and note how the music automatically sounds better. This button is specifically designed to amplify the highs and lows.

This exercise may help you enjoy your music more without excessive volume (and potential hearing loss). Just make sure that you can perceive all frequencies, not just those in the middle range.

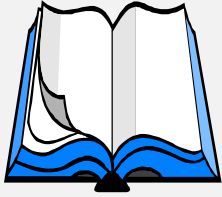
ACTIVE LEARNING EXERCISE III

Empathizing (An Affective Skill)

In Chapter 3, you read about Helen Keller, an extraordinary woman who was blind from birth. The following exercise will improve your ability to empathize a bit with her and other visually handicapped people you might know. As you have read in the text, noncritical thinkers view everything and everyone else in relationship to themselves. They fail to understand or appreciate another's thoughts, feelings, or behaviors, as critical thinkers do.

Find a partner to take you on a "blind walk" for at least 20 to 30 minutes. Have the person first blindfold you, and then lead you on a walk filled with varied sensory experiences. Go up a hill, over a gravel driveway, across a dirt field full of potholes, past a bakery, through the school cafeteria, next to a rough wall, past an open freezer door, through a quiet library or the noisy student union, and so on. Try to identify each of these varied sensory experiences. Remind your partner not to give hints regarding your location. Now exchange roles and lead your partner on a similar “blind walk.”

What happened when you or your partner were without your sense of sight? Did you adapt? Could you navigate better and more easily identify your location by the end of the “blind walk?” How did you compensate for your lack of sight? Did you substitute another sense for your sense of sight?



CHAPTER OVERVIEW (Review)

The following CHAPTER OVERVIEW provides a narrative overview of the main topics covered in the chapter. Like the Visual Summary found at the end of each chapter in the text, this narrative summary provides a final opportunity to review chapter material.

I. Experiencing Sensations *Sensory processing includes reduction, transduction, and coding.*

Transduction, or the conversion of physical stimuli into neural impulses, occurs at the receptors in our sense organs. Each sensory system is specialized to code its stimuli into unique sets of neural impulses that the brain interprets as light, sound, touch, and so on.

The absolute threshold is the smallest magnitude of a stimulus we can detect. The difference threshold is the smallest change in a stimulus we can detect. The process of sensory adaptation decreases our sensitivity to constant, unchanging stimuli.

II. Vision *Light is a form of energy that is part of the electromagnetic spectrum. The wavelength of a light determines its hue, or color; the amplitude, or the height of a light wave, determines its intensity.*

The function of the eye is to capture light and focus it on visual receptors that convert light energy to neural impulses. The cornea is the clear bulge at the front of the eye where light enters; the sclera is the white outer covering of the eye; the pupil is the hole through which light passes into the eye; and the iris consists of colored muscles that surround the pupil. The lens is the elastic structure that bulges and flattens to focus an image on the retina, which contains the visual receptor cells. The visual receptors, called photoreceptors, are the rods and cones. The rods enable us to see at night. The cones are specialized for color and fine detail.

III. The Other Senses *The sense of hearing is known as audition. We hear sound via sound waves, which result from rapid changes in air pressure caused by vibrating objects. The frequency of these sound waves is sensed as the pitch of the sound, whereas the amplitude of the waves is perceived as loudness.*

The outer ear conducts the sound waves to the eardrum, which vibrates and sets in motion the tiny bones of the middle ear that conduct the sound vibrations to the oval window. The oval window is at the entrance to the cochlea, the inner ear structure that contains the receptors for hearing, called hair cells.

The sense of smell (olfaction) and the sense of taste (gustation) are called the chemical senses and are closely interrelated. The receptors for olfaction are in the olfactory epithelium located at the top of the nasal cavity. According to the lock-and-key theory, we can smell different odors because each three-dimensional odor molecule fits only into one type of receptor. Taste receptors are sensitive to four basic tastes: salty, sweet, sour, and bitter.

The body senses are the skin senses, the vestibular sense, and the kinesthetic sense. The skin senses detect pressure, temperature, and pain; they protect the internal organs and provide basic survival information. The vestibular sense is the sense of balance. The vestibular apparatus is located in the inner

ear. The kinesthetic sense provides the brain with information about body posture and orientation, as well as body movement. The kinesthetic receptors are spread throughout the body in muscles, joints, and tendons.

IV. Perception Whereas sensation is the process of detecting and transducing raw sensory information, perception is the process of selecting, organizing, and interpreting this data into a usable mental representation of the world.

V. Selection The selection process allows us to choose which of the billions of separate sensory messages will eventually be processed. Selective attention allows us to direct our attention to the most important aspect of the environment at any one time. Feature detectors are specialized cells in the brain that distinguish between different sensory inputs.

The selection process is very sensitive to changes in the environment. We pay more attention to stimuli that change in intensity, novelty, location, and so on. Motivation and personal needs and interests also play key roles in selection.

VI. Organization The Gestalt psychologists set forth laws explaining how people perceive form. The most fundamental principle is the distinction between figure and ground. Other principles include proximity, continuity, closure, contiguity, and similarity.

Through the perceptual constancies---size constancy, shape constancy, color constancy, and brightness constancy---we are able to perceive a stable environment, even though the actual sensory information we receive may be constantly changing. These constancies are based on our prior experiences and learning.

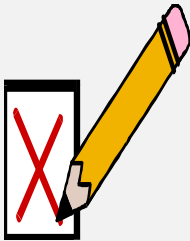
VII. Interpretation Monocular and Binocular Depth Cues: There are two major types of cues to size and distance: binocular cues, which require two eyes, and monocular cues, which only require one eye. The binocular cues are retinal disparity and convergence. Monocular cues include linear perspective, aerial perspective, texture gradients, interposition, light and shadow, relative size, accommodation, and motion parallax.

Color Perception: Color perception is explained by a combination of the two traditional color theories. The trichromatic theory proposes three color systems maximally sensitive to blue, green, and red. The opponent-process theory also proposes three color systems but holds that each is sensitive to two opposing colors---blue and yellow, red and green, and black and white---and that they operate in an on-off fashion. The trichromatic system operates in the cones of the retina, whereas the opponent-process system occurs in the optic nerve and thalamus.

Interpretation: Interpretation, the final stage of perception, can be influenced by early life experiences, perceptual expectancy, cultural factors, needs and interests, and frames of reference.

ESP: Extrasensory perception (ESP) is the supposed ability to perceive things through senses that go beyond the known senses. ESP research has produced "fragile" results, and critics condemn its scientific validity because it lacks experimental control and replicability.

SELF-TESTS (Review & wRite)



Completing the following SELF-TESTS will provide immediate feedback on how well you have mastered the material. In the *fill-in exercises*, write the appropriate word or words in the blank spaces. The *matching exercise* requires you to match the terms in one column to their correct definitions in the other. For the *multiple-choice questions* in Practice Tests I and II, circle or underline the correct answer. When you are unsure of any answer, be sure to highlight or specially mark the item and then go back to the text for further review. Correct answers are provided at the end of this study guide chapter.

FILL-IN EXERCISES

1. _____ involves receiving, translating, and transmitting raw sensory data from the external and internal environments to the brain (p. 88).
2. The process of selecting, organizing, and interpreting sensory data into usable mental representations of the world is known as _____ (p. 88).
3. Body cells specialized to detect and respond to stimulus energy are called _____ (p. 88).
4. In light waves, the wavelength determines _____ and amplitude _____ (p. 92).
5. Light waves enter the eye through a rough transparent shield called the _____, they then pass through a small opening called the _____; and are then focused by the elastic _____ on the _____ at the back of the eye (p. 93).
6. _____ results from the movement of air molecules in a particular wave pattern (p. 97).
7. The idea that each odor molecule fits into only one type of smell receptor cell according to its shape is known as the _____ theory of olfaction (p. 100).
8. False impressions of the physical world produced by physical distortions (such as desert mirages) are known as _____ (p. 107).
9. A decrease in response of a sensory system to continuous stimulation is known as _____; whereas _____ involves the tendency of the brain to ignore environmental factors that remain constant (pp. 91, 109)
10. Perceptual constancies largely result from _____ (p. 114).

MATCHING EXERCISES

Column A

- a. Depth Perception
- b. Transduction
- c. Sensory Adaptation
- d. Cones
- e. Audition
- f. Olfaction
- g. Blind Spot
- h. Accommodation
- i. Electromagnetic Spectrum
- j. Extrasensory Perception

Column B

- 1. ____ “Psychic” abilities beyond the known senses.
- 2. ____ Band of radiant energy from the sun.
- 3. ____ Bulging and flattening of the lens to allow focusing.
- 4. ____ A part of the retina containing no visual receptors.
- 5. ____ Decrease in response due to continuous stimulation.
- 6. ____ Receptors that respond to color and fine detail.
- 7. ____ The sense of hearing.
- 8. ____ The sense of smell.
- 9. ____ Ability to perceive distance and three dimensions.
- 10. ____ Receptors converting stimulus into neural impulse.

PRACTICE TEST I

1. The process of receiving, transducing, and transmitting information from the outside world is called _____.
 - a. perception
 - b. detection
 - c. sensation
 - d. integration
2. The process of converting a physical stimulus into a nerve impulse is called _____.
 - a. reduction
 - b. conduction
 - c. transduction
 - d. neural stimulation
3. The lowest or quietest sound people can hear is their _____.
 - a. threshold of excitation
 - b. absolute threshold
 - c. difference threshold
 - d. low point
4. The _____ of light determines its hue, and the _____ determines its brightness.
 - a. wavelength, amplitude
 - b. pitch, wavelength
 - c. timbre, amplitude
 - d. wavelength, frequency

Study and Review Guide

5. The receptors in the eye responsible for daylight and color vision are the ____; the receptors in the eye responsible for dim light vision are the ____.
 - a. rods, cones
 - b. hair cells, cilia
 - c. lens, cornea
 - d. cones, rods

6. The frequency of a sound wave is sensed as the ____ of a sound.
 - a. pitch
 - b. intensity
 - c. loudness
 - d. height

7. The chemical senses are ____.
 - a. taste and touch
 - b. taste and smell
 - c. vision and audition
 - d. touch and smell

8. The sensitive area of the nasal cavity where the smell receptors are located is called the olfactory ____.
 - a. retina
 - b. cochlea
 - c. papillae
 - d. epithelium

9. The skin senses include pressure, pain, and ____.
 - a. posture
 - b. movement
 - c. balance
 - d. warmth and cold

10. The sense of balance is called the ____ sense.
 - a. auditory
 - b. gustatory
 - c. kinesthetic
 - d. vestibular

Study and Review Guide

11. The process of selecting, organizing, and interpreting sensory data into a usable mental representation of the world is the definition of _____.
 - a. sensation
 - b. perception
 - c. transduction
 - d. adaptation

12. Subliminal messages, those messages presented below threshold, can affect behavior in which of the following ways?
 - a. They can help you learn while asleep.
 - b. They can cause you to change your behavior to comply with the message.
 - c. They can improve your memory for things that you learn while awake.
 - d. Subliminal messages have no effect on your behavior whatsoever.

13. Which of the following is one of the Gestalt principles of organization?
 - a. roundness
 - b. isolation
 - c. symmetry
 - d. figure and ground

14. Monocular and binocular are two categories of _____.
 - a. depth or distance cues
 - b. size adaptations
 - c. perceptual constancies
 - d. visual corrections

15. When an observer moves, near objects seem to pass quickly, intermediate objects seem to pass rather slowly, and far objects seem to stand almost still. The name of this monocular cue is _____.
 - a. linear perspective
 - b. accommodation
 - c. relative size
 - d. motion parallax

16. The _____ theory of color vision states that there are three different color systems (red, green, and blue).
 - a. trichromatic
 - b. opponent-process
 - c. tri-receptor
 - d. lock-and-key

Study and Review Guide

17. Which of the following is **NOT** correct?
- brighter objects are usually seen as closer
 - larger objects are usually seen as farther away
 - the object that obscures another object is seen as closer
 - distant objects appear fuzzy because of dust and haze in the air
18. The muscular cue to distance caused by both eyes turning in or out to focus on an object is called _____.
- binocular rivalry
 - retinal disparity
 - convergence
 - accommodation
19. According to the Gestalt principle of proximity, objects that _____.
- continue a pattern will be grouped together
 - are close together will be grouped together
 - are similar in size or shape will be grouped together
 - all of these options
20. Concerning ESP (extrasensory perception), research suggests that people should be _____.
- believers
 - doing more research to support ESP
 - very skeptical of ESP claims
 - developing their own ESP

PRACTICE TEST II

1. The conversion of stimulus energy into neural impulses is called _____.
- coding
 - transduction
 - transference
 - reception
2. Sensory adaptation occurs when _____.
- one sensory system takes over for another that has been damaged
 - information from several sensory systems are organized together in the brain
 - a sensory system becomes less responsive to continuous stimulation
 - a stroke or other brain damage prevents full sensory capability

Study and Review Guide

3. Light travels through the cornea to the _____.
 - a. pupil, lens, and retina
 - b. lens, pupil, and retina
 - c. vitreous humor, aqueous humor, and retina
 - d. retina on the back of the lens

4. _____ is the process that occurs when your visual system shifts from cones to rods upon entering a dark room.
 - a. Light adaptation
 - b. Sensory adaptation
 - c. Dark adaptation
 - d. Accommodation

5. Which of the following is an example of pitch?
 - a. you switch the lever on your telephone from soft to loud
 - b. your mother raises her voice when you ignore her
 - c. you can barely hear your television because of the traffic noise outside
 - d. your neighbor's car alarm alternates between high and low tones

6. The ossicles are also called the _____.
 - a. malleus, incus, and stapes
 - b. olfactory receptor cells
 - c. hair cells in the vestibular system
 - d. cochlear canals

7. Rock concerts, blaring radios, and raucous pep rallies are _____.
 - a. adolescent rites of passage
 - b. signs of a good time
 - c. damaging to auditory receptor cells
 - d. the reason parents lose their sanity by age 50

8. Smell and taste can be adversely affected by _____.
 - a. heart disease
 - b. the common cold
 - c. spicy food
 - d. all of these options

Study and Review Guide

9. African men and women have a _____ androstenone (a component of sweat) than American men and women.
- greater ability to detect
 - significantly lower ability to detect
 - milder sensitivity to
 - lower responsiveness to
10. Light stimulation of both pressure and pain receptors results in the sensation of _____.
- itching
 - tickling
 - vibration
 - all of these options
11. The gate control theory is founded on the knowledge that pain signals travel slower than other sensory messages because the pain nerve fibers are _____.
- not myelinated
 - myelinated
 - smaller
 - larger
12. The process of _____ explains why several people witnessing the same event give different accounts of what actually happened.
- sensation
 - perception
 - accommodation
 - assimilation
13. Multiple messages are least likely to be attended to when they occur _____.
- sequentially
 - in different sensory systems
 - in the same sensory system
 - simultaneously in different sensory systems
14. Habituation occurs when _____.
- a sensory system stops responding to a continuous stimulus
 - the brain begins to ignore constant environmental factors
 - you repeat the same behavior until it becomes automatic
 - all of these options

Study and Review Guide

15. Your personality, interests, and _____ are all involved in what you choose to perceive.
 - a. current state of satisfaction or deprivation
 - b. level of accommodation
 - c. ability to assimilate
 - d. sensory sensitivity

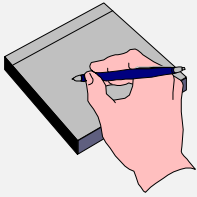
16. The belief that our basic abilities are learned through experience with the five senses is held by _____.
 - a. naturalists
 - b. environmentalists
 - c. nativists
 - d. empiricists

17. Blue-yellow, red-green, and black-white are associated with the _____ theory of color perception.
 - a. trichromatic
 - b. opponent-process
 - c. nativist
 - d. empiricist

18. The trichromatic theory explains color vision at the level of the _____.
 - a. thalamus
 - b. hypothalamus
 - c. retina
 - d. lens

19. The active and passive kitten research by Held and Hein found that perceptual development is _____ early learning.
 - a. not affected by
 - b. dramatically influenced by
 - c. modestly affected by
 - d. entirely dependent on

20. The fact that the same person will demonstrate extrasensory abilities in one laboratory study but not another suggests that _____.
 - a. replication of studies is a waste of time
 - b. the studies were probably not valid
 - c. the researcher or the participant was biased against ESP
 - d. ESP is not a reliable phenomenon



ANSWERS

The following answers to active learning exercises, fill-ins, matching exercises, and practice tests 1 and 2 provide immediate feedback on your mastery of the material. Try not to simply memorize the answers. When you are unsure of your “guess” or make an error, be sure to go back to the textbook and carefully review. This will greatly improve your scores on classroom exams and quizzes.

ACTIVE LEARNING EXERCISE I

Anatomy of the eye

a. lens, b. vitreous humor, c. iris, d. pupil, e. cornea, f. retina, g. sclera, h. optic nerve, i. blind spot.

FILL-IN EXERCISES

1. sensation; 2. perception; 3. receptors; 4. color, brightness; 5. cornea, pupil, lens, retina; 6. sound; 7. lock-and-key; 8. Illusions; 9. sensory adaptation, habituation; 10. prior experience and learning.

MATCHING EXERCISES

a. 9, b. 10, c. 5, d. 6, e. 7, f. 8, g. 4, h. 3, i. 2, j. 1.

<u>PRACTICE TEST I</u>		<u>PRACTICE TEST II</u>	
1. c (p. 88)	11. b (p. 88)	1. b (p. 88)	11. c (p. 104)
2. c (p. 88)	12. d (pp. 110-11)	2. c (p. 91)	12. b (p. 107)
3. b (p. 90)	13. d (p. 111)	3. a (pp. 93-94)	13. c (p. 108)
4. a (p. 92)	14. a (p. 118)	4. c (p. 96)	14. b (p. 109)
5. d (p. 95)	15. d (p. 121)	5. d (p. 97)	15. a (p. 110)
6. a (p. 97)	16. a (p. 122)	6. a (p. 97)	16. d (p. 117)
7. b (p. 100)	17. b (pp. 120-21)	7. c (p. 99)	17. b (p. 122)
8. d (p. 100)	18. c (p. 119)	8. b (p. 100)	18. c (p. 123)
9. d (p. 103)	19. b (p. 111)	9. a (p. 101)	19. b (p. 125)
10.d (p. 105)	20. c (p. 128)	10.d (p. 104)	20. d (pp. 128-29)

Chapter

4

Consciousness

OUTLINE (Survey & Question)

This outline is intended to help you *survey* the chapter. As you read through the various sections, write down any *questions* or comments that come to mind in the space provided. This is a valuable part of active learning and the SQ4R method. It not only makes your reading time more enjoyable and active, but it also increases your retention and understanding of the material.

TOPIC

NOTES

I. STUDYING CONSCIOUSNESS

- A. Levels of Awareness: A Continuum of Alertness

- B. Daydreams and Fantasies: A “Mid-Ground” Level of Awareness

II. SLEEP AND DREAMS

- A. Sleep as a Biological Rhythm: The Power of Circadian Rhythms

- B. How Scientists Study Sleep: Using the EEG and Sleep Labs

C. Sleep and Sleep Deprivation: A Look at the Research

D. Why We Dream: Three Views

E. Active Learning: Interpreting Your Dreams

F. Sleep Disorders: When Sleep Becomes a Problem

III. DRUGS AND CONSCIOUSNESS

A. Understanding Drugs: Important Terminology

B. Depressants: Drugs That Suppress the Central Nervous System

C. Stimulants: Drugs That Activate the Central Nervous System

D. Narcotics: Drugs That Relieve Pain

E. Hallucinogens: Drugs That Alter Perception

F. Explaining Drug Use: The How's and Why's

G. Research Highlight: Addictive Drugs as the Brain's "Evil Tutor"

IV. ADDITIONAL ROUTES TO ALTERNATE STATES

A. Hypnosis: Myths and Therapeutic Uses

B. Meditation: A "Higher" State of Consciousness?

C. Gender and Cultural Diversity: Consciousness across Cultures



LEARNING OBJECTIVES (Read, Recite & wRite)

While *reading* the chapter, stop periodically and *recite* (or repeat in your own words) the answers to the following learning objectives. It will also help your retention if you *write* your answer in the space provided. (Page numbers refer to the text Psychology in Action, 5th Ed.)

1. Define consciousness and alternate states of consciousness (ASCs); describe the various levels of awareness, including the difference between controlled and automatic processing, and the purpose of daydreaming and fantasies (pp. 136-139).
2. Identify common myths about sleep (p. 140).
3. Define circadian rhythms; discuss the effects of disruptions in circadian rhythms (pp. 141-142).
4. Explain how electroencephalograms (EEGs) are used to study sleep; and describe the various physical changes associated with each stage of sleep, including the REM stage and the non-REM Stages 1, 2, 3, and 4 (pp. 143-144).
5. Explain problems associated with sleep deprivation. Discuss possible biological causes of sleep; describe how the repair/restoration theory of sleep differs from the evolutionary/circadian theory (pp. 145-149).

Study and Review Guide

6. Describe and differentiate between the psychoanalytic, biological, and cognitive views of dreaming (pp. 149-150).
7. Discuss the five major sleep disorders: insomnia, sleep apnea, narcolepsy, nightmares, and night terrors (pp. 151-153).
8. Define psychoactive drugs; compare and contrast drug abuse versus addiction, psychological versus physical dependence, and tolerance versus cross-tolerance (pp. 154-155).
9. Define depressants; describe the effects of alcohol on the nervous system and behavior, and discuss why alcohol is a growing social concern (pp. 156-158).
10. Define stimulants; and describe the effects of nicotine and cocaine (pp. 159-160).
11. Define narcotics; and describe their effects on the nervous system and behavior (pp. 156, 160).
12. Define hallucinogens; and describe the effects of LSD and marijuana on the nervous system and behavior (pp. 156, 160-162).
13. Briefly explain how drugs act as agonists and antagonists to neurotransmitters, and describe how psychoactive drugs can affect each of the four steps in neurotransmission (pp. 162-164).
14. Explain the four major reasons people use and abuse drugs, and describe recent research regarding the importance of dopamine and glutamate on drug addiction (pp. 164-166).

Study and Review Guide

15. Define hypnosis, and discuss five myths and controversies regarding its use. State how hypnosis is used today in medical and psychotherapy settings (pp. 167-169).

16. Define meditation, and discuss its potential benefits (pp. 169-170).

17. Discuss why there has been such a strong interest in altered states of consciousness throughout history and across cultures; and explain the three major functions of ASCs for all cultures (pp. 170-172).



KEY TERMS (Review)

The *review* step in the SQ4R method is very important to your performance on quizzes and exams. Upon completion of this chapter, you should be able to define the following terms.

Activation-Synthesis Hypothesis: _____

Addiction: _____

Agonist: _____

Alternate States of Consciousness (ASCs): _____

Antagonist: _____

Study and Review Guide

Automatic Processes: _____

Circadian Rhythms: _____

Consciousness: _____

Controlled Processes: _____

Depressants: _____

Drug Abuse: _____

Evolutionary/Circadian Theory: _____

Hallucinogens: _____

Hypnagogic State: _____

Hypnosis: _____

Study and Review Guide

Information Processing Theory of Dreams: _____

Insomnia: _____

Latent Content: _____

Manifest Content: _____

Meditation: _____

Narcolepsy: _____

Narcotics: _____

Nightmares: _____

Night Terrors: _____

Physical Dependence: _____

Psychoactive Drugs: _____

Study and Review Guide

Psychological Dependence: _____

Rapid Eye Movement (REM) Sleep: _____

Repair/Restoration Theory: _____

Sleep Apnea: _____

Stimulants: _____

Tolerance: _____

Wish-Fulfillment Theory: _____



ACTIVE LEARNING EXERCISES (Recite)

The *recite* step in the SQ4R method requires you to be an ACTIVE learner. By completing the following exercises, you will test and improve your mastery of the chapter material, which will also improve your performance on quizzes and exams. Answers to some exercises appear at the end of this study guide chapter.

Active Learning Exercise I

Using the following list of common dream themes, please place a check mark next to each one you have ever experienced.

Study and Review Guide

- ___1. Snakes
- ___2. Seeing yourself as dead
- ___3. Being nude in public
- ___4. School, teachers, studying
- ___5. Sexual experiences
- ___6. Arriving too late
- ___7. Eating
- ___8. Being frozen with fright
- ___9. Death of a loved person
- ___10. Being locked up
- ___11. Finding money
- ___12. Swimming
- ___13. Falling
- ___14. Being dressed inappropriately
- ___15. Being smothered
- ___16. Trying repeatedly to do something
- ___17. Fire
- ___18. Failing an examination
- ___19. Flying
- ___20. Being attacked or pursued

Now compare your responses to those of 250 other college students:

1. 49% 2. 33% 3. 43% 4. 71% 5. 66% 6. 64% 7. 62% 8. 58% 9. 57% 10. 56% 11. 56% 12. 52 %
13. 83% 14. 46% 15. 44% 16. 71% 17. 41% 18. 39% 19. 34% 20. 77%

How did you compare? Do you think your responses might differ from others due to your age, gender, culture, or other variables? How? If you would like to read more about the “universality of dreams,” check out the following reference:

Griffith, R. M., Miyago, O., & Tago, A. (1958). The universality of typical dreams: Japanese vs. Americans. *American Anthropologist*, 60, 1173-1179.

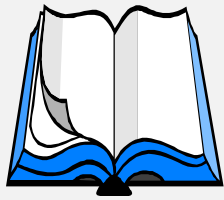
Active Learning Exercise II

Distinguishing Fact from Opinion (A Cognitive Skill)

The topic of drugs often generates heated debate between people with different perspectives. When discussing controversial issues, it is helpful to make a distinction between statements of fact and statements of opinion. (A fact is a statement that can be proven true. An opinion is a statement that expresses how a person feels about an issue or what someone thinks is true.) Although it is also important to determine whether the facts are true or false, in this exercise simply mark "O" for opinion and "F" for fact to test your ability to distinguish between the two:

- ___ 1. Marijuana is now one of America's principal cash crops.
- ___ 2. Friends don't let friends drive drunk.
- ___ 3. People who use drugs aren't hurting anyone but themselves.
- ___ 4. Legalizing drugs such as cocaine, marijuana, and heroin would make them as big a problem as alcohol and tobacco.
- ___ 5. The number of cocaine addicts is small compared with the number of alcoholics.
- ___ 6. The American Medical Association considers alcohol to be the most dangerous of all psychoactive drugs.
- ___ 7. Random drug tests are justified for personnel involved with public safety (e.g., air traffic controllers, police officers, etc.).
- ___ 8. If parents use drugs, their children are more likely to use drugs.
- ___ 9. Mothers who deliver cocaine-addicted babies are guilty of child abuse.
- ___ 10. Alcohol abuse by pregnant mothers is one of the most important factors in mental retardation.

ANSWERS: Since answers may vary, we recommend discussing your responses with classmates and friends. Listening to the reasons others give for their answers often provides valuable insights and help in distinguishing between fact and opinion. (Adapted from Bach, 1988.)



CHAPTER OVERVIEW (Review)

The following CHAPTER OVERVIEW provides a narrative overview of the main topics covered in the chapter. Like the Visual Summary found at the end of each chapter in the text, this narrative summary provides a final opportunity to *review* chapter material.

I. Studying Consciousness *Consciousness is the general state of being aware and responsive to stimuli and events in both the external and internal environments. Alternate states of consciousness (ASCs) are mental states other than ordinary waking consciousness. ASCs include sleep, dreaming, drug use, hypnosis, and meditation.*

Consciousness exists along a continuum of awareness. Controlled processes, which require focused attention, are at the highest level of awareness. Automatic processes, which require minimal attention, and daydreaming and fantasies are found in the middle of the continuum. Unconsciousness and coma are at the lowest level of awareness.

II. Sleep and Dreaming *Circadian rhythms affect our sleep and waking cycle so that disruptions due to shift work and jet lag can cause serious problems. A typical night's sleep consists of four to five 90-minute cycles. The cycle begins in Stage 1 and then moves through Stages 2, 3, and 4. After reaching the deepest level of sleep, the cycle reverses up to the REM (rapid eye movement) state when the person often is dreaming.*

The exact function of sleep is not known, but it is thought to be necessary for its restorative value, both physically and psychologically. It also has some evolutionary functions. Sleep seems to be controlled by several neurotransmitters and by various areas of the brain.

Three major theories attempt to explain why we dream: The psychoanalytic view says dreams are disguised symbols of repressed desires. The biological (activation-synthesis) perspective argues that dreams are simple by-products of random stimulation of brain cells. The cognitive view suggests that dreams are an important part of information processing of everyday experiences.

Many people suffer from sleep problems. People who have repeated difficulty falling or staying asleep experience insomnia. A person with sleep apnea temporarily stops breathing during sleep, causing loud snoring or poor quality sleep. Narcolepsy is excessive daytime sleepiness characterized by sudden sleep attacks. Nightmares are bad dreams that occur during REM sleep. Night terrors are abrupt awakenings with feelings of panic that occur during non-REM.

III. Drugs and Consciousness *Psychoactive drugs change conscious awareness or perception. Drug abuse refers to drug taking that causes emotional or physical harm to the individual or others, while addiction results from repeated drug use and leads to increased tolerance and withdrawal symptoms. Tolerance is a physiological process whereby the user needs larger and more frequent doses of a drug to produce the desired effect.*

Psychoactive drug use can lead to psychological dependence or physical dependence or both. Psychological dependence is a desire or craving to achieve the effects produced by a drug. Physical dependence is a change in bodily processes due to continued drug use that results in withdrawal symptoms when the drug is withheld.

The major categories of psychoactive drugs are depressants, stimulants, narcotics, and hallucinogens. Depressant drugs slow the central nervous system, whereas stimulants activate it. Narcotics numb the senses and relieve pain, while hallucinogens produce sensory or perceptual distortions.

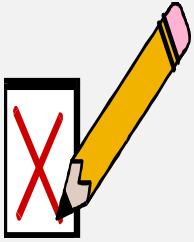
Drugs act primarily by changing the effect of neurotransmitters in the brain. Drugs that act as agonists mimic neurotransmitters, while antagonists oppose or block normal neurotransmitter functioning. Drugs are used and abused for four major reasons--positive associations, addiction, prevention of withdrawal, and personal or sociocultural forces.

IV. Additional Routes to Alternate States *Hypnosis is an alternate state of heightened suggestibility characterized by relaxation and intense focus. Hypnosis has been used to reduce pain and increase concentration, and as an adjunct to psychotherapy.*

Meditation is a group of techniques designed to focus attention and produce heightened awareness. Meditation can produce dramatic changes in physiological processes, including heart rate and respiration.

While the study of consciousness has waxed and waned among psychologists, the public has historically been very interested--particularly in ASCs. Among peoples of all cultures, ASCs (1) are part of sacred rituals, (2) serve social interaction needs, and (3) provide individual rewards.

SELF-TESTS (Review & write)



Completing the following SELF-TESTS will provide immediate feedback on how well you have mastered the material. In the *fill-in exercises*, write the appropriate word or words in the blank spaces. The *matching exercise* requires you to match the terms in one column to their correct definitions in the other. For the *multiple-choice questions* in Practice Tests I and II, circle or underline the correct answer. When you are unsure of any answer, be sure to highlight or specially mark the item and then go back to the text for further review. Correct answers are provided at the end of this study guide chapter.

FILL-IN EXERCISES

1. _____ is generally defined as the awareness of external and internal stimuli (p. 136).
2. A mental state other than ordinary waking consciousness, such as sleep, dreaming, or hypnosis, is known as _____ (p. 136).
3. Mental activities that require focused attention, while generally interfering with other ongoing activities are known as _____ (p. 138).
4. REM sleep is also called _____ sleep because the brain is aroused and active, yet the sleeper's muscles are deeply relaxed and unresponsive (p. 144).
5. According to the _____ theory, sleep serves an important recuperative function, while the _____ theory suggests sleep is a part of circadian rhythms and evolved as a means to conserve energy and protect individuals from predators (p. 147).
6. The major sleep disorders include _____ (difficulty falling and staying asleep or awakening too early), _____ (temporary cessation of breathing during sleep), _____ (sudden and irresistible onsets of sleep during normal waking hours, _____ (anxiety-arousing dreams that generally occur during REM sleep), and _____ (abrupt awakenings from non-REM sleep with feelings of panic) (pp. 151-153).
7. _____ drugs affect the nervous system and cause a change in behavior, mental processes, and conscious experience (p. 154).
8. _____ refers to the mental desire or craving to achieve the effects produced by a drug; whereas _____ involves modifications of bodily processes requiring use of the drug for minimal functioning (p. 155).

Study and Review Guide

9. _____ drugs act on the brain and nervous system to increase overall activity and responsiveness; whereas _____ drugs suppress or slow down bodily processes (pp. 157, 159).
10. An alternate state of heightened suggestibility characterized by relaxation and intense focus is known as _____ (p. 167).

MATCHING EXERCISES

Column A

- a. Circadian Rhythms
- b. Biological View
- c. Sleep Apnea
- d. Drug Abuse
- e. Automatic Processes
- f. Cognitive View
- g. REM sleep
- h. Cocaine
- i. Psychoanalytic View
- j. ASCs

Column B

1. ____ Mental activities requiring minimal attention.
2. ____ Stage of sleep marked by rapid eye movements.
3. ____ Freud's wish-fulfillment theory of dream interpretation.
4. ____ Suspected factor in SIDS.
5. ____ Mental state other than ordinary waking consciousness.
6. ____ Causes emotional or physical harm to drug user or others.
7. ____ Dangerous stimulant.
8. ____ Information processing theory of dreams.
9. ____ Biological changes that occur on a 24-hour cycle.
10. ____ Activation-synthesis hypothesis of dreaming.

PRACTICE TEST I

1. _____ is the state of being aware and responsive to stimuli in the external and internal environment.
 - a. Awareness
 - b. Consciousness
 - c. Alertness
 - d. Central processing
2. _____ processes are mental activities that require minimal attention, without affecting other activities
 - a. Emotional
 - b. Peripheral
 - c. Conscious
 - d. Automatic
3. This is **NOT** one of the major reasons many cultures support the use of alternate states of consciousness.
 - a. to seek spiritual enlightenment
 - b. to facilitate social interactions
 - c. to escape from stress and anxiety
 - d. to heal unconscious wounds inflicted by societal taboos

Study and Review Guide

4. Biological rhythms that occur on a 24-hour cycle are called _____.
 - a. circadian rhythms
 - b. synchronisms
 - c. diurnal circuits
 - d. nocturnal transmissions

5. _____ waves are associated with normal wakefulness.
 - a. Alpha
 - b. Beta
 - c. Theta
 - d. Delta

6. With regard to sleep, research suggests that _____ is nature's first need.
 - a. REM sleep
 - b. non-REM sleep
 - c. dreaming
 - d. hypnagogic sleep

7. The _____ theory says that sleep allows us to replenish what was depleted during daytime activities.
 - a. repair/restoration
 - b. evolutionary/circadian
 - c. supply-demand
 - d. conservation of energy

8. _____ developed the theory that dreams are a coherent synthesis of random, spontaneous neuron activity.
 - a. Freud
 - b. Hobson and McCarley
 - c. Watson and Skinner
 - d. Maslow

9. Insomnia occurs when you persistently _____.
 - a. have difficulty staying awake
 - b. go to sleep too early
 - c. awake too early
 - d. all of these options

10. Sudden infant death syndrome (SIDS or "crib death") may be related to _____.
 - a. narcolepsy
 - b. poor maternal nutrition
 - c. sleep apnea
 - d. parental narcolepsy

Study and Review Guide

11. _____ are chemicals that affect the nervous system and cause a change in behavior, mental processes, and conscious experience.
- Endocrinologists
 - Psychoactive drugs
 - Alternators
 - Bio-neural drugs
12. A chemical that blocks the action of a neurotransmitter is called a(n) _____.
- synaptic inhibitor
 - antagonist
 - alternator
 - receptor-blocker
13. A mental desire or craving to achieve the effects produced by a drug is known as _____.
- withdrawal effects
 - dependency
 - psychological dependence
 - physical dependence
14. Requiring larger and more frequent doses of a drug to produce a desired effect is characteristic of _____.
- withdrawal
 - tolerance
 - psychoactive dependence
 - all of these options
15. According to the American Medical Association, the drug that is the most dangerous and physically damaging is _____.
- cocaine
 - nicotine
 - alcohol
 - heroin
16. Which of the following drugs is a central nervous system stimulant?
- amphetamine
 - alcohol
 - heroin
 - barbiturates

Study and Review Guide

17. Which of the following is **NOT** classified as a hallucinogen?
- a. mescaline
 - b. psilocybin
 - c. amphetamines
 - d. LSD
18. Marijuana is classified in your text as a _____.
- a. narcotic
 - b. hallucinogen
 - c. barbiturate
 - d. LSD derivative
19. This is **NOT** associated with hypnosis.
- a. the use of imagination
 - b. broad, unfocused attention
 - c. a passive, receptive attitude
 - d. decreased pain
20. Research on the effects of meditation has found a(n) _____.
- a. increase in blood pressure
 - b. reduction in stress
 - c. lack of evidence for changes in any physiological functions
 - d. increase in appetite

PRACTICE TEST II

1. _____ processing can help us concentrate on more important tasks but can also lead to health or relationship problems.
- a. Controlled
 - b. Unconscious
 - c. Automatic
 - d. Autonomic
2. Most people spend almost _____ hours daydreaming in a 24-hour day.
- a. 3
 - b. 5
 - c. 8
 - d. 12

Study and Review Guide

3. Melatonin is a brain chemical that may help regulate _____.
 - a. sleep
 - b. daydreaming
 - c. dreaming at night
 - d. controlled processing
4. EEG is the abbreviation for _____, which is used to record brain waves.
 - a. electrical emissions graph
 - b. electroencephalograph
 - c. electro-energy grams
 - d. even elephants get grumpy
5. Your breathing is regular, your heart rate and blood pressure are slowing, your brain is producing theta waves, and you can be easily awakened. It is most likely that you are in _____.
 - a. a hypnagogic transition between wakefulness and sleep
 - b. a daydreaming state
 - c. Stage 1 sleep
 - d. Stage 2 sleep
6. Which of the following is **NOT** characteristic of REM sleep?
 - a. irregular breathing
 - b. eyes moving back and forth
 - c. dreaming
 - d. low-frequency brain waves
7. Caffeine works in the brain to keep you awake by _____.
 - a. decreasing histamine
 - b. increasing epinephrine
 - c. inhibiting serotonin
 - d. blocking the chemical that inhibits acetylcholine
8. The _____ theory of dreaming suggests that dreams help us sift through and sort out our everyday experiences.
 - a. information processing
 - b. cognitive sorting
 - c. thought weeding
 - d. housekeeping
9. Narcolepsy is characterized by sudden episodes of _____.
 - a. nightmares in Stage 1 sleep
 - b. REM sleep in the middle of wakeful periods
 - c. epileptic seizures during Stage 4 sleep
 - d. not being able to breathe during any stage of sleep

Study and Review Guide

10. This is **NOT** a characteristic of night terrors.
 - a. occurrence during non-REM sleep
 - b. panicky feelings
 - c. imbedded within a pleasant dream
 - d. intense physiological arousal

11. Which of the following is a psychoactive drug?
 - a. an antacid
 - b. insulin
 - c. endorphins
 - d. nicotine

12. Alcohol can cause a coma or death when it reaches a level equal to or greater than _____.
 - a. .1%
 - b. .5%
 - c. .75%
 - d. .90%

13. Physical damage, severe addiction, and psychological dependence are all associated with the use of _____.
 - a. cocaine
 - b. Prozac
 - c. antipsychotic medication
 - d. all of these options

14. Jake uses this drug to relax and achieve a state of euphoria. Jaime uses the same drug as an analgesic. Jeremiah uses the drug to feel more content, and to make his experience of reality more pleasant. All three may experience life-threatening side effects with this drug.
 - a. cocaine
 - b. a narcotic
 - c. a sedative
 - d. lithium

15. Using marijuana, following prior experience with a hallucinogen, may trigger _____.
 - a. coma
 - b. death
 - c. flashbacks
 - d. all of these options

Study and Review Guide

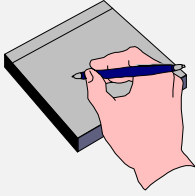
16. The _____ model suggests that drug use is maintained by a genetic predisposition for addiction, the drug's effects on pleasure centers in the brain, and the effectiveness of the route used to take the drug.
 - a. addiction
 - b. positive associations
 - c. glutamate receptor
 - d. biological

17. Dopamine and glutamate are two neurotransmitters implicated in _____.
 - a. drug-induced amnesia
 - b. the arousing effects of most drugs
 - c. the lowering of inhibitions under the influence of drugs
 - d. drug addiction

18. According to this model, deeply relaxed people with heightened suggestibility will allow a hypnotist to direct their fantasies and behavior.
 - a. altered state theory
 - b. suggestibility hypothesis
 - c. relaxation/role-playing theory
 - d. guided visualization explanation

19. Meditation is designed to _____.
 - a. decrease attentional focus
 - b. decrease your state of awareness
 - c. decrease focus by increasing awareness
 - d. focus attention and heighten awareness

20. Ninety percent of 488 societies surveyed by Bourguignon reported that they _____.
 - a. ban the use of non-medicinal psychoactive drugs
 - b. practice institutionally-recognized methods of altering consciousness
 - c. have severe drug-addiction problems
 - d. regulate the use of hypnosis, meditation, and other non-medical methods of altering consciousness



ANSWERS

The following answers to active learning exercises, fill-ins, matching exercises, and practice tests 1 and 2 provide immediate feedback on your mastery of the material. Try not to simply memorize the answers. When you are unsure of your “guess” or make an error, be sure to go back to the textbook and carefully review. This will greatly improve your scores on classroom exams and quizzes.

FILL-IN EXERCISES

1. consciousness; 2. alternate states of consciousness (ASCs); 3. controlled processing; 4. paradoxical; 5. repair/restoration, evolutionary/circadian; 6. insomnia, sleep apnea, narcolepsy, nightmares, night terrors; 7. Psychoactive; 8. psychological dependence, physical dependence; 9. stimulants, depressants; 10. hypnosis.

MATCHING EXERCISES

a. 9, b. 10, c. 4, d. 6, e. 1, f. 8, g. 2, h. 7, i. 3, j. 5.

<u>PRACTICE TEST I</u>		<u>PRACTICE TEST II</u>	
1. b (p. 136)	11. b (p. 154)	1. c (p. 138)	11. d (p. 154)
2. d (p. 138)	12. b (p. 162)	2. c (p. 139)	12. b (p. 157)
3. d (pp. 170-72)	13. c (p. 155)	3. a (p. 142)	13. a (p. 160)
4. a (p. 141)	14. b (p. 155)	4. b (p. 143)	14. b (p. 160)
5. b (p. 143)	15. c (p. 158)	5. c (p. 144)	15. c (p. 160)
6. b (p. 145)	16. a (p. 156)	6. d (p. 144)	16. a (p. 164)
7. a (p. 147)	17. c (p. 160)	7. d (p. 148)	17. d (p. 165)
8. b (p. 149)	18. b (pp. 160-61)	8. a (p. 150)	18. c (p. 168)
9. c (p. 151)	19. b (p. 167)	9. b (p. 153)	19. d (p. 169)
10.c (p. 151)	20. b (p. 169)	10.c (p. 153)	20. b (p. 170)

Chapter

5

Learning

OUTLINE (Survey & Question)

This outline is intended to help you *survey* the chapter. As you read through the various sections, write down any *questions* or comments that come to mind in the space provided. This is a valuable part of active learning and the SQ4R method. It not only makes your reading time more enjoyable and active, but it also increases retention and understanding of the material.

TOPIC

NOTES

I. LEARNED AND INNATE BEHAVIORS

- A. Learned Behavior: A Result of Experience

- B. How Do We Learn Things? Let Us Count the Ways

II. CONDITIONING

- A. Classical Conditioning: Learning through Stimulus Pairing

- B. Research Highlight: Scanning the Brain for Learning

- C. Operant Conditioning: Learning from Consequences
- D. Conditioning in Action: Using Learning Principles in Everyday Life
- E. Conditioning Yourself to Succeed
- F. Active Learning: Operant Conditioning in the Real World

III. COGNITIVE LEARNING

- A. The Study of Insight: Kohler's Work with Chimpanzees
- B. Latent Learning: Tolman's "Hidden Learning"

IV. OBSERVATIONAL LEARNING

- A. Gender and Cultural Diversity: Scaffolding as a Teaching Technique in Different Cultures



LEARNING OBJECTIVES (Read, Recite & wRite)

While *reading* the chapter, stop periodically and *recite* (or repeat in your own words) the answers to the following learning objectives. It will also help your retention if you *write* your answer in the space provided. (Page numbers refer to the text Psychology in Action, 5th Ed.)

1. Define learning; explain how learned and innate behavior are different; and define the three major theories of learning: conditioning, cognitive, and observational (pp. 178-180).
2. Explain the process of classical conditioning, describing the differences between a neutral, a conditioned, and an unconditioned stimulus, and between a conditioned and an unconditioned response (pp. 180-182).
3. Describe how classical conditioning can explain emotional responses and higher order conditioning; describe recent PET and fMRI research on conditioning (pp. 182-184).
4. For classical conditioning: compare extinction with forgetting, describe spontaneous recovery, and compare generalization and discrimination (pp. 185-187).
5. Describe the three factors that distinguish operant from classical conditioning (pp. 187-188).
6. Define reinforcement and punishment, explaining how the terms positive and negative apply to each of these learning procedures (pp. 188-189).
7. Describe the differences between negative reinforcement and punishment, and state the negative consequences of using punishment (pp. 189-193).

Study Guide

8. For operant conditioning: describe extinction and spontaneous recovery (pp. 193-194).
9. Describe the different schedules of reinforcement, and state the effect each schedule will have on response rate and extinction (pp. 194-196).
10. Explain how unintentional reinforcement can lead to superstitious behavior (pp. 196-197).
11. For operant conditioning, define shaping, and give an example of its use, and compare generalization and discrimination (pp. 197-198).
12. Explain the importance of feedback, timing, consistency, and order of presentation on the effective use of both reinforcement and punishment (pp. 198-199).
13. Describe the conditioning principles used with biofeedback therapy and in programmed instruction (pp. 200-202).
14. Explain how insight and latent learning are examples of cognitive learning (pp. 203-204).
15. Define social cognitive theory (previously known as social learning theory), and describe the four processes involved in learning through observation (pp. 205-206).
16. Describe the cross-cultural use of scaffolding as a teaching technique, and explain how it combines the principles of shaping and modeling (pp. 206-208).



KEY TERMS (Review)

The *review* step in the SQ4R method is very important to your performance on quizzes and exams. Upon completion of this chapter, you should be able to define the following terms.

Avoidance Conditioning: _____

Biofeedback: _____

Classical Conditioning: _____

Cognitive Learning Theory: _____

Cognitive Map: _____

Conditioned Emotional Response (CER): _____

Conditioned Response (CR): _____

Conditioned Stimulus (CS): _____

Conditioning: _____

Study Guide

Continuous Reinforcement: _____

Discrimination: _____

Escape Conditioning: _____

Extinction: _____

Feedback: _____

Fixed Interval: _____

Fixed Ratio: _____

Forgetting: _____

Generalization: _____

Higher Order Conditioning: _____

Study and Review Guide

Innate: _____

Insight: _____

Latent Learning: _____

Learned Helplessness: _____

Learning: _____

Modeling: _____

Negative Punishment: _____

Negative Reinforcement: _____

Neutral Stimulus (NS): _____

Observational Learning Theory: _____

Operant Conditioning: _____

Study Guide

Partial Reinforcement: _____

Passive Aggressiveness: _____

Phobia: _____

Positive Punishment: _____

Positive Reinforcement: _____

Primary Reinforcers: _____

Programmed Instruction: _____

Punishment: _____

Reinforcement: _____

Scaffolding: _____

Study and Review Guide

Schedule of Reinforcement: _____

Secondary Reinforcers: _____

Shaping: _____

Social Learning Theory: _____

Spontaneous Recovery: _____

Superstitious Behavior: _____

Unconditioned Response (UCR): _____

Unconditioned Stimulus (UCS): _____

Variable Interval: _____

Variable Ratio: _____

Vicarious Conditioning: _____



ACTIVE LEARNING EXERCISES (Recite)

The *recite* step in the SQ4R method requires you to be an ACTIVE learner. By completing the following exercises, you will test and improve your mastery of the chapter material, which will also improve your performance on quizzes and exams. Answers to some exercises appear at the end of this study guide chapter.

ACTIVE LEARNING EXERCISE I

Read each of the following examples.

- I. If the situation is an example of classical conditioning, label the NS, UCS, UCR, CS, and CR.
- II. If the situation is an example of operant conditioning, label whether it is positive or negative reinforcement, or positive or negative punishment.

SITUATION 1

A very bright (mildly painful) light is turned on a rat. The rat has learned that he can turn off the light by pressing a lever on the other side of his cage. As soon as the light comes on, the rat runs across the room and presses the lever.

- A. The behavior of pressing the lever is an example of _____ conditioning.
- B. If you chose classical, follow part I of the instructions; if you chose operant, follow part II.

SITUATION 2

When a mother strokes her infant's skin, the stroking creates pleasure responses in the baby. After this goes on for many days, the baby begins to show pleasure responses simply at the sight of the mother (before even being touched).

- A. The baby's pleasure response is an example of _____ conditioning.
- B. If you chose classical, follow part I of the instructions; if you chose operant, follow part II.

SITUATION 3

A patient in a mental hospital is very disruptive at mealtimes. She grabs food from the plates of those sitting near her and tries to cram the food into her mouth. Because this behavior of stealing food is very

undesirable, a plan is developed whereby every time the patient steals food from other plates, she is immediately taken to a room without food.

A. The mental health staff is attempting to change the behavior of stealing through _____ conditioning.

B. If you chose classical, follow part I of the instructions; if you chose operant, follow part II.

SITUATION 4

Imagine you have a friend who keeps the temperature in her home so high that each occasion on which you visit her you find yourself perspiring. The last time you visited her, you noticed that you began to perspire and became uncomfortable as soon as you saw her house (before you even were inside).

A. Your perspiring behavior can be explained as _____ conditioning.

B. If you chose classical, follow part I of the instructions; if you chose operant, follow part II.

ACTIVE LEARNING EXERCISE II

Applying Knowledge to New Situations (A Cognitive Skill)

In Chapter 5, you learned about classical conditioning and that such learning can be applied to various situations in your own life. A critical thinker will be able to decipher the situations that are present during a learning experience. Such a thinker will also notice how often one stimulus situation is paired with another and that the two become associated with each other. However, identifying the neutral stimulus, the unconditioned stimulus (UCS), the unconditioned response (UCR), the conditioned stimulus (CS), and the conditioned response (CR) can be difficult unless you have had some practice. The following paragraphs describe classical conditioning situations. Your task is to identify the neutral stimulus, the UCS, the UCR, the CS, and the CR.

1. A researcher sounds a tone, then places a piece of meat into a dog's mouth, causing it to salivate. Eventually the sound of the tone alone causes the dog to salivate.

NS: _____

UCS: _____

UCR: _____

CS: _____

CR: _____

Study Guide

2. As your teenage son leaves the house and tells you “goodbye,” he always slams the door. Recently, you’ve noticed that you flinch as soon as he says “goodbye.”

NS: _____

UCS: _____

UCR: _____

CS: _____

CR: _____

3. A researcher flashes a light and then blows a puff of air into the research participant’s eye. The participant automatically blinks. After a few trials, just the flash of light will cause the participant to blink.

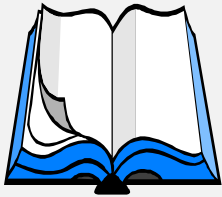
NS: _____

UCS: _____

UCR: _____

CS: _____

CR: _____



CHAPTER OVERVIEW (Review)

The following CHAPTER OVERVIEW provides a narrative overview of the main topics covered in the chapter. Like the Visual Summary found at the end of each chapter in the text, this narrative summary provides a final opportunity to *review* chapter material.

I. Learned and Innate Behaviors *Learning is a relatively permanent change in behavior or behavioral potential as a result of practice or experience. A learned behavior is the opposite of an innate, or instinctual, behavior, which is affected by maturation only and not by practice.*

Conditioning emphasizes the relationship between a stimulus and a response. Conditioning can be classical (learning an involuntary response to a stimulus that doesn’t normally cause such a response) or operant (learning a voluntary response to a stimulus as a result of previous responses). Cognitive learning theory emphasizes thinking processes as they are related to learning.

Observational learning theory explains how people and animals learn by watching a model perform a task.

II. Classical Conditioning *In classical conditioning, the type of learning investigated by Watson and Pavlov, an originally neutral stimulus (NS) is paired with another stimulus that causes a particular reflex or emotional response, the unconditioned stimulus (UCS). After several pairings, the neutral stimulus will cause an unconditioned response (UCR) to occur. When the (NS) begins to cause the response, it is then called the conditioned stimulus (CS).*

In higher order conditioning, the NS is paired with a CS to which the subject has already been conditioned, rather than with an UCS. In classical conditioning, extinction occurs when the UCS is repeatedly withheld and the association between the CS and the UCS is broken. Spontaneous recovery occurs when a CR that had been extinguished spontaneously reappears. Generalization occurs when stimuli similar to the original CS elicit the CR. Discrimination occurs when only the CS elicits the CR..

III. Operant Conditioning *Operant conditioning is the type of learning investigated by Thorndike and Skinner. In operant conditioning, people or animals learn by the consequences of their responses. When a response is made it is either reinforced or punished. Reinforcement is anything that is likely to cause an increase in the response. Punishment is anything that is likely to cause a decrease in the response.*

Positive reinforcement occurs when something desirable is added to increase the response rate. Negative reinforcement occurs when something aversive is removed to increase the response rate. There are two types of negative reinforcement: It is avoidance conditioning if a behavior increases when a person or animal avoids an aversive situation. It is escape conditioning if a behavior increases when a person or animal escapes an aversive situation.

Positive punishment occurs when something aversive is given to decrease the response rate. Negative punishment occurs when something good is removed to decrease the response rate.

Operant Schedules of Reinforcement

In operant conditioning, extinction occurs when the reinforcement is withheld until the subject stops responding to the stimulus. Spontaneous recovery occurs just as it does after the classical conditioning extinction process. The amount of time required for extinction is directly related to the schedule of reinforcement being used.

In operant conditioning, there are several schedules of reinforcement. Continuous schedules reinforce for each response. Partial schedules reinforce for some, not all, responses.

To use reinforcement and punishment effectively, provide feedback, give reinforcers and punishers as soon as possible after the behavior, be consistent, and be sure the reinforcement or punishment comes after—not before—the behavior.

Shaping is the process of teaching a person or animal a complex task by reinforcing successive approximations to a desired response. Biofeedback is the "feeding back" of biological information such as heart rate or blood pressure so a person can use the information to control normally automatic functions of the body. Programmed instruction is an application of operant conditioning techniques whereby people learn at their own pace.

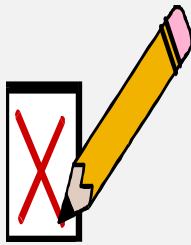
You can apply conditioning principles to help you become a better student by reinforcing good study habits and withholding reinforcement for bad study habits.

IV. Cognitive and Observational Learning Cognitive psychologists investigate the mental or cognitive processes that lead to learned behavior. Kohler, in working with chimpanzees, demonstrated that learning could occur with a sudden flash of insight. Tolman demonstrated latent learning, learning that occurs in the absence of reinforcements and remains hidden until it is needed.

Observational learning is the process of learning how to do something by watching a behavior occur or reading about one, rather than learning through doing. Bandura proposed social learning theory—or social cognitive theory—to explain how people learn by observing others who serve as models.

Scaffolding is a teaching technique used in many cultures; it is most often used in informal situations between a master teacher and learner and involves a combination of shaping and modeling.

SELF-TESTS (Review & write)



Completing the following SELF-TESTS will provide immediate feedback on how well you have mastered the material. In the *fill-in exercises*, write the appropriate word or words in the blank spaces. The *matching exercise* requires you to match the terms in one column to their correct definitions in the other. For the *multiple-choice questions* in Practice Tests I and II, circle or underline the correct answer. When you are unsure of any answer, be sure to highlight or specially mark the item and then go back to the text for further review. Correct answers are provided at the end of this study guide chapter.

FILL-IN EXERCISES

- _____ involves learning reflexive, involuntary responses to stimuli that don't normally cause such responses (p. 179).
- In operant conditioning, individuals learn _____ responses to stimuli through the consequences of previous responses (p. 179).
- Any classically conditioned emotional response to a previously neutral stimulus is known as a _____ (p. 182).
- _____ occurs when a previously extinguished response suddenly reappears (p. 186).
- _____ involves any procedure resulting in an increase in a response; whereas _____ results in a decrease in a response (p. 188).
- According to research on _____, when organisms experience constant and unavoidable punishment, they eventually give up and quietly submit (p. 192).

Study and Review Guide

7. A response that is _____ reinforced will be learned more rapidly; whereas a response that is _____ reinforced will be more resistant to extinction (p. 194).
8. A baseball player touching his right ear three times before batting may be an example of _____ (p. 196).
9. _____ involves reinforcing successive approximations to the desired behavior (p. 197).
10. A teaching technique where the teacher reinforces successes of the student and models more difficult parts of the task is known as _____ (p. 206).

MATCHING EXERCISES

Column A

Column B

- | | |
|------------------------------|---|
| a. Spontaneous Recovery | 1. ____ Inborn behavior emerging during predetermined period. |
| b. Cognitive Learning Theory | 2. ____ Gradual unlearning by presenting CS without the UCS. |
| c. Positive Punishment | 3. ____ Reappearance of a previously extinguished CR. |
| d. Generalization | 4. ____ Reinforcing successive approximations. |
| e. Reinforcement | 5. ____ Causes no relevant response. |
| f. Classical Conditioning | 6. ____ Anything likely to cause an increase in response. |
| g. Innate | 7. ____ Stimuli similar to original CS elicit the CR. |
| h. Shaping | 8. ____ Something aversive given to decrease response rate. |
| i. Extinction | 9. ____ Focuses on thinking processes related to learning. |
| j. Neutral Stimulus (NS) | 10. ____ Involuntary response to a stimulus. |

PRACTICE TEST I

1. A relatively permanent change in behavior, or behavior potential, as a result of practice or experience is the definition of _____.
 - a. learning
 - b. conditioning
 - c. behavior modification
 - d. modeling
2. Behavior that is affected by maturation only, and not by practice is _____.
 - a. classically conditioned
 - b. operantly conditioned
 - c. innate
 - d. learned via modeling

Study Guide

3. When your mouth waters at the sight of a chocolate cake, it is an example of _____.
 - a. operant conditioning
 - b. social learning
 - c. vicarious conditioning
 - d. classical conditioning

4. Suppose a boy learns to fear bees by being stung when he touches a bee. In this situation the unconditioned stimulus is the _____.
 - a. bee
 - b. sting
 - c. fear
 - d. crying

5. Which of the following is the proper sequence of events in classical conditioning?
 - a. UCS-CS-UCR
 - b. CS-UCS-UCR
 - c. UCR-UCS-CS
 - d. UCR-CS-UCS

6. Higher order conditioning occurs when a(n) _____.
 - a. previously neutral stimulus elicits a conditioned response
 - b. neutral stimulus is paired with a conditioned stimulus
 - c. neutral stimulus is paired with an unconditioned stimulus
 - d. unconditioned response is paired with a conditioned stimulus

7. In classical conditioning, extinction occurs when the _____.
 - a. conditioned stimulus is no longer paired with the unconditioned response
 - b. conditioned stimulus is no longer paired with the unconditioned stimulus
 - c. conditioned response is no longer paired with the unconditioned stimulus
 - d. unconditioned stimulus is ambiguous

8. Once classical conditioning has occurred, the CR may be elicited by stimuli that are similar to the CS. This is called _____.
 - a. generalization
 - b. discrimination
 - c. spontaneous conditioning
 - d. replication of the effect

Study and Review Guide

9. Anything that causes an increase in a response is a(n) _____.
 - a. conditioned stimulus
 - b. reinforcement
 - c. punishment
 - d. unconditioned stimulus

10. Anything that causes a decrease in a response is a(n) _____.
 - a. conditioned stimulus
 - b. reinforcement
 - c. punishment
 - d. unconditioned stimulus

11. In order for reinforcement or punishment to be effective, it must come _____.
 - a. before the behavior
 - b. after the behavior
 - c. after the unconditioned stimulus
 - d. before the unconditioned stimulus

12. Negative reinforcement and punishment are _____.
 - a. the same
 - b. the best ways to learn a new behavior
 - c. not the same because negative reinforcement increases behavior and punishment decreases behavior
 - d. not the same, even though they both decrease behavior

13. In order for extinction to occur in operant conditioning, _____.
 - a. reinforcement must be withheld
 - b. punishment must be used
 - c. a conditioned stimulus must be paired with an unconditioned stimulus
 - d. a secondary reinforcer must be present

14. Spontaneous recovery occurs when a _____.
 - a. previously generalized response discriminates
 - b. previously extinguished response reappears
 - c. behavior increases in frequency
 - d. behavior has been learned and not conditioned

Study Guide

15. If you reinforce your dog for sitting by giving him a treat every third time he sits, you are using a _____.
- continuous schedule of reinforcement
 - random ratio reinforcement schedule
 - fixed interval reinforcement schedule
 - fixed ratio reinforcement schedule
16. Superstitious behavior occurs because _____.
- it has been reinforced on a fixed ratio schedule
 - a person or an animal thinks the behavior causes a reinforcer when in reality the behavior and the reinforcement are not connected
 - it is reinforced on a random ratio schedule
 - the behavior and the reinforcement come in close proximity to one another, causing the superstitious behavior to increase in magnitude
17. The process of rewarding successive approximations of the desired behavior is called _____.
- extinction
 - discrimination
 - shaping
 - generalization
18. Which of the following is an example of cognitive learning?
- latent learning
 - learning to ride a bicycle
 - learning to eat with a fork
 - learning to tie your shoes
19. Albert Bandura's social learning theory places a lot of emphasis on _____.
- classical conditioning
 - operant conditioning
 - extinction
 - modeling
20. Vicarious conditioning occurs when a person or an animal _____.
- learns from experience
 - exhibits latent learning
 - becomes conditioned by watching a model being conditioned
 - learns and then relearns the same behavior after extinction

PRACTICE TEST II

1. A behavior that consists of an innate complex sequence of responses is called a(n) _____.
 - a. reflex
 - b. instinct
 - c. autonomic response
 - d. ritual

2. When a response occurs as a result of a learned association between an external stimulus and that response, this is called _____.
 - a. empiricism
 - b. insight
 - c. latent learning
 - d. conditioning

3. Observational learning combines conditioning with _____.
 - a. cognitive learning
 - b. social learning
 - c. shaping
 - d. insight

4. In Pavlov's classical conditioning experiments with dogs, salivation was the _____.
 - a. reflexive response
 - b. conditioned response
 - c. both of these options
 - d. none of these options

5. The _____ develops gradually during the course of classical conditioning.
 - a. unconditioned stimulus
 - b. neutral stimulus
 - c. unconditioned response
 - d. conditioned stimulus

6. An emotional response that is evoked by a previously neutral event is called a(n) _____.
 - a. conditioned emotional response
 - b. gut reaction
 - c. emotional reaction
 - d. elicited emotional response

Study Guide

7. In higher order conditioning, a neutral stimulus is paired with _____.
 - a. another neutral stimulus
 - b. a previously conditioned stimulus
 - c. two or more unconditioned stimuli
 - d. two or more unconditioned responses

8. Spontaneous recovery occurs when _____ suddenly reappears.
 - a. your lost wallet
 - b. a previously extinguished response
 - c. an extinct instinct
 - d. a forgotten stimulus-response sequence

9. Operant conditioning is an example of _____ in action.
 - a. Thorndike's law of effect
 - b. Skinner's law of reinforcement
 - c. Watson's rule of punishment
 - d. Pavlov's theory of stimulus-response

10. _____ are unlearned, usually satisfy a biological need, and increase the probability of a response.
 - a. Primary instincts
 - b. Secondary instincts
 - c. Primary reinforcers
 - d. Secondary reinforcers

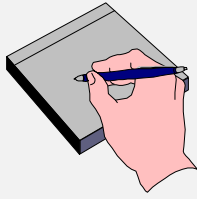
11. This is an example of passive aggressiveness that can be a side effect of punishment.
 - a. Janeel is late to dinner every night and never does her chores on time.
 - b. Erique refuses to do anything his father asks him to do, unless strictly supervised.
 - c. Gabe intentionally leaves food on dishes he puts in the dishwasher, knowing they will not get clean.
 - d. all of these options

12. Gamblers continue to put their money into slot machines because they pay off _____.
 - a. on a variable ratio
 - b. at variable intervals
 - c. at fixed intervals
 - d. on a fixed ratio

Study and Review Guide

13. When you use biofeedback equipment to lower your blood pressure, this provides you with a sense of accomplishment and a more relaxed physiological state. In this case, biofeedback is a(n) _____.
a. operant conditioning agent
b. fixed interval reinforcer
c. secondary reinforcer
d. conditioned stimulus
14. Programmed instruction uses the principles of _____.
a. classical conditioning
b. reinforcement and discouragement (punishment)
c. latent learning
d. information processing
15. Insight is _____.
a. based on unconscious classical conditioning
b. divinely inspired
c. a sudden flash of understanding
d. an artifact of operant conditioning
16. Latent learning occurs without being rewarded and _____.
a. remains hidden until a future time when it is needed
b. is spontaneously recovered
c. serves no useful purpose
d. has been found only in nonhuman species
17. Social learning theory suggests that we learn many behaviors by _____.
a. observing others
b. observing our inner processes
c. teaching others
d. shaping our own and others behaviors
18. "Follow my lead" could be a motto for _____.
a. classical conditioning
b. operant conditioning
c. latent learning
d. social learning
19. Vicarious conditioning combines the principles of classical conditioning with the principles of _____.
a. latent learning
b. observational learning
c. insight
d. all of these options

20. Scaffolding is a teaching technique that combines _____ to help a person learn complicated tasks.
- programmed instruction and classical conditioning
 - vicarious conditioning and insight
 - shaping and modeling
 - reinforcement and rewards



ANSWERS

The following answers to active learning exercises, fill-ins, matching exercises, and practice tests 1 and 2 provide immediate feedback on your mastery of the material. Try not to simply memorize the answers. When you are unsure of your “guess” or make an error, be sure to go back to the textbook and carefully review. This will greatly improve your scores on classroom exams and quizzes.

ACTIVE LEARNING EXERCISE I

1. A. Operant, B. Negative Reinforcement; 2. A. Classical, B. NS = sight of mother, UCS = stroking, UCR = feelings of pleasure, CS = sight of mother, CR = feelings of pleasure; 3. A. Operant, B. Negative Punishment; 4. A. Classical, B. NS = sight of house, UCS = high temperature, UCR = perspiring, CS = sight of the house, CR = perspiring.

ACTIVE LEARNING EXERCISE II

- NS: sound of the tone
UCS: piece of meat
UCR: salivating
CS: sound of the tone
CR: salivating
- NS: saying “goodbye”
UCS: loud noise from door slamming
UCR: flinching
CS: saying “goodbye”
CR: flinching

Study and Review Guide

- 3. NS: flash of light
UCS: puff of air to the eye
UCR: blinking
CS: flash of light
CR: blinking

FILL-IN EXERCISES

1. classical conditioning; 2. voluntary; 3. conditioned emotional response (CER); 4. spontaneous recovery; 5. reinforcement, punishment; 6. learned helplessness; 7. continuously, partially; 8. superstitious behavior; 9. shaping; 10 scaffolding.

MATCHING EXERCISES

a. 3, b. 9, c. 8, d. 7, e. 6, f. 10, g. 1, h. 4, i. 2, j. 5.

<u>PRACTICE TEST I</u>		<u>PRACTICE TEST II</u>	
1. a (p. 178)	11. b (p. 188)	1. b (p. 178)	11. d (p. 191)
2. c (p. 178)	12. c (p. 189)	2. d (p. 179)	12. a (p. 195)
3. d (p. 180)	13. a (p. 193)	3. a (p. 180)	13. c (p. 200)
4. b (p. 181)	14. b (p. 186)	4. c (p. 180)	14. b (p. 201)
5. b (pp. 188, 198)	15. d (p. 195)	5. d (p. 182)	15. c (pp. 203-04)
6. b (p. 183)	16. b (p. 196)	6. a (p. 182)	16. a (p. 204)
7. b (p. 185)	17. c (p. 197)	7. b (p. 183)	17. a (p. 205)
8. a (p. 186)	18. a (p. 204)	8. b (p. 186)	18. d (pp. 205-06)
9. b (p. 188)	19. d (p. 205)	9. a (pp. 180-89)	19. b (p. 206)
10.c (p. 188)	20. c (p. 206)	10.c (p. 189)	20. c (p. 206)

Chapter

6

Memory

OUTLINE (Survey & Question)

This outline is intended to help you *survey* the chapter. As you read through the various sections, write down any *questions* or comments that come to mind in the space provided. This is a valuable part of active learning and the SQ4R method. It not only makes your reading time more enjoyable and active, but it also increases retention and understanding of the material.

TOPIC

NOTES

I. THE TRADITIONAL VIEW OF MEMORY

- A. Sensory Memory: The First Stage of the Process
- B. Short-Term Memory: Selecting and Concentrating
- C. Long-Term Memory: The Memory Storage System
- D. False Memories and Repressed Memories:
Fact or Fiction?
- E. Active Learning: Exploring Your Memories

- F. Gender and Cultural Diversity: Cultural Differences in Memory

II. THE PROBLEM OF FORGETTING

- A. Research on Forgetting: Factors That Affect Remembering
- B. Theories of Forgetting: Why We Don't Remember Everything
- C. Active Learning: Applying Theories of Forgetting

III. THE BIOLOGY OF MEMORY

- A. Theories of Memory: Changes in the Brain
- B. Research Highlight: How Do Memories Get There in the First Place?
- C. Amnesia: Trauma and Shock Effects
- D. Memory Impairment: Brain Damage
- E. Alzheimer's Disease: Progressive Memory Loss

IV. EXCEPTIONAL MEMORIES

- A. Improving Memory: Using Mnemonics



LEARNING OBJECTIVES (Read, Recite & wRite)

While *reading* the chapter, stop periodically and *recite* (or repeat in your own words) the answers to the following learning objectives. It will also help your retention if you *write* your answer in the space provided. (Page numbers refer to the text Psychology in Action, 5th Ed.)

1. Describe the three distinct storage systems in the traditional view of memory (pp. 214-215).
2. Describe the duration, capacity, and accuracy of sensory memory; discuss the process and purpose of automatic and deliberate selection at this stage (pp. 215-216).
3. Describe the duration, capacity, and accuracy of short-term memory; discuss the effects of chunking, dual-coding, levels of processing, maintenance rehearsal, and interference at this stage (pp. 216-221).
4. Describe the duration, capacity, and accuracy of long-term memory (pp. 221-223).
5. Differentiate between semantic and episodic memory, and give an example of each (p. 223).
6. Discuss how long-term memory is organized, and differentiate between recognition, recall, and relearning (pp. 224-227).
7. Discuss the alteration of long-term memory, including the limitations regarding flashbulb memories and eyewitness events (pp. 227-228).
8. Differentiate between false and repressed memories, and discuss the research and controversy regarding the origins of these memories (pp. 228-230).

Study and Review Guide

9. Describe the impact of culture on short-term and long-term memory (pp. 230-231).
10. Discuss forgetting and describe how each of the following factors affects remembering: serial position, distributed versus massed practice, and state-dependent memory (pp. 232-235).
11. Describe theories of forgetting: interference, decay, retrieval failure, and motivated forgetting. Differentiate between proactive and retroactive interference (pp. 235-236).
12. Explain memory in terms of the following biological factors that occur in the brain: reverberating circuits, long-term potentiation, kinase enzymes, and specific brain areas (pp. 237-240).
13. Define amnesia, and differentiate between retrograde and anterograde amnesia (p. 240).
14. Describe the effects on memory of brain damage due to tumors, strokes, or surgery; discuss the causes, symptoms, and treatment for Alzheimer's disease, and compare this to the "normal" effects of aging on memory (pp. 240-243).
15. Describe eidetic imagery and discuss its benefits and drawbacks (p. 243).
16. Provide examples of the various mnemonic devices and describe how they help to improve memory (pp. 243-246).



KEY TERMS (Review)

The *review* step in the SQ4R method is very important to your performance on quizzes and exams. Upon completion of this chapter, you should be able to define the following terms.

Alzheimer's Disease: _____

Amnesia: _____

Anterograde Amnesia: _____

Chunking: _____

Cue: _____

Decay Theory: _____

Distributed Practice: _____

Dual-Coding System: _____

Study and Review Guide

Eidetic Imagery: _____

Electroconvulsive Shock (ECS): _____

Episodic Memory: _____

False Memories: _____

Flashbulb Memories: _____

Interference Task: _____

Interference Theory: _____

Landmark Events: _____

Levels of Processing: _____

Long-Term Memory (LTM): _____

Long-Term Potentiation (LTP): _____

Study and Review Guide

Maintenance Rehearsal: _____

Massed Practice: _____

Method of Loci: _____

Method of Word Associations: _____

Mnemonic Devices: _____

Motivated Forgetting Theory: _____

Peg-Word System: _____

Proactive Interference: _____

Recall: _____

Recognition: _____

Study and Review Guide

Redintegration: _____

Relearning: _____

Repressed Memories: _____

Retrieval: _____

Retrieval Failure Theory: _____

Retroactive Interference: _____

Retrograde Amnesia: _____

Reverberating Circuits: _____

Semantic Memory: _____

Sensory Memory: _____

Serial Position Effect: _____

Study and Review Guide

Short-Term Memory (STM): _____

State-Dependent Memory: _____

Substitute Word System: _____

Tip-of-the-Tongue (TOT): _____

Working Memory: _____

Zeigarnik Effect: _____



ACTIVE LEARNING EXERCISES (Recite)

The *recite* step in the SQ4R method requires you to be an ACTIVE learner. By completing the following exercises, you will test and improve your mastery of the chapter material, which will also improve your performance on quizzes and exams. Answers to some exercises appear at the end of this study guide chapter.

ACTIVE LEARNING EXERCISE I

Using the Substitute Word System for Remembering Names

Now that you have learned the substitute word system, it can help improve your memory for names. Try converting a person's name into a visual image that will act as a memory retrieval cue.

Study and Review Guide

Some names, like Sandy Storm, are easily visualized. However, you can also use this system with more common names, like “Brewster.” Ask yourself, “Are there any words I can visualize that sound like the name?” If not, break the name into parts and imagine substitutes for them. For example, for the name “Brewster,” substitute the word “rooster” or divide it into “brew” and “stir.” With “rooster,” imagine a big rooster with the facial features of the person named “Brewster.” For “brew” and “stir,” you might visualize a large mug of beer being stirred by an oar. Each of the images you choose should be absurd, exaggerated, or as distinctive as possible. The idea is to form a *lasting* image.

For practice, use the substitute word system and create corresponding vivid images for the following names: George Washington, Plato, Pearl Bailey, Heather Locklear, and Ricky Martin.

ACTIVE LEARNING EXERCISE II

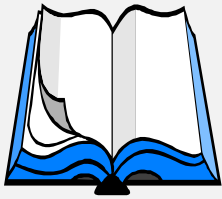
Gathering Data (A Behavioral Skill)

Collecting up-to-date, relevant information is an important component of critical thinking. To help build this skill, as well as to gain important insights into memory strategies, try the following:

- a. Interview three classmates who do well on exams and that you believe have good memories. Ask about their study techniques and test taking strategies. Using the examples found in Appendix B of this study guide, ask which technique they find most useful? Now interview three classmates or friends who complain about their college grades and poor memories. Compare their study techniques and test taking strategies to those who remember well. What are the differences?

- b. Interview three people who have taken a reading improvement or speed-reading course. What methods were taught that increased reading speed and comprehension? What changes have they

noticed in their college grades or exam performances since taking the course? Did they use any of the techniques or mnemonics discussed in the text?



CHAPTER OVERVIEW (Review)

The following CHAPTER OVERVIEW provides a narrative overview of the main topics covered in the chapter. Like the Visual Summary found at the end of each chapter in the text, this narrative summary provides a final opportunity to review chapter material.

I. The Traditional View of Memory Humans have at least three different kinds of memory: sensory memory, short-term memory (STM), and long-term memory (LTM).

Sensory memory is the memory that occurs within our sensory apparatus while incoming messages are being transmitted to the brain. Short-term memory involves memory for current thoughts. Short-term memory can hold about seven items and can store them for about 30 seconds; however, chunking can increase its capacity, and we can use maintenance rehearsal to retain information at this stage.

Dual-coding refers to the visual and verbal input channels of STM. During the storage process between STM and LTM, the way information is processed affects our ability to retrieve it from LTM.

Working memory is the activated portion of long-term memory that holds information in short-term memory storage and processes the information for long-term storage and for use in cognitive functions such as problem solving and decision making.

II. Long Term Memory Long-term memory is more permanent memory where information and ideas are stored for future use. The part of LTM where facts and their relation to one another are stored is called semantic memory. Memories of specific events are stored in episodic memory.

Information in LTM is organized into categories and subcategories that form a network. Several pathways in the network lead to any particular piece of information but, nonetheless, stored memories are not always retrievable.

Retrieval is the process of getting information out of LTM. The two types of retrieval are recognition and recall. Studies of eyewitness testimony show that memory can be modified and that the retrieval process is not always accurate. It is possible to create false memories for past events. But all recovered memories are not necessarily false memories. It is nearly impossible to tell a recovered false memory from a recovered repressed memory.

III. Forgetting *To minimize forgetting when you study, use distributed practice, short study sessions interspersed with rest periods. The worst way to study or try to remember information is to use massed practice, studying large amounts of information without rest.*

Some memories are state-dependent and are affected by states of arousal. It is easier to remember these memories if you are in a state similar to that in which the learning took place.

The interference theory of forgetting states that memories are forgotten because of either proactive or retroactive interference. Proactive interference occurs when previously learned information interferes with newly learned information. Retroactive interference occurs when newly learned information interferes with previously learned information.

The decay theory of forgetting simply states that memory, like all biological processes, deteriorates as time passes. The motivated forgetting theory states that people forget things that are painful, threatening, or embarrassing. The retrieval failure theory of forgetting claims that information stored in LTM is never forgotten but may at times be inaccessible.

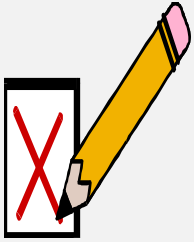
IV. The Biology of Memory *A short-term memory is processed when neurons fire over and over in reverberating circuits. The process whereby short-term memories become long-term memories is called long-term potentiation (LTP). Recent research shows that enzymes called kinases are involved in LTP.*

Studies of people with amnesia, brain damage, and Alzheimer's disease, as well as brain scans of normal people, indicate that specific brain structures and neurotransmitters are involved in storing and retrieving memories. The major brain structures involved are areas in the frontal lobes, the temporal lobes and the hippocampus.

V. Exceptional Memories *People who have eidetic imagery or photographic memory are able to retrieve a detailed copy of the original visual image from LTM. For most people, retrieval can be greatly improved by more effective use of memory processes.*

The most effective strategies to keep from forgetting are mnemonic devices, which organize or tag information visually or verbally. They include method of loci, the peg-word system, and the method of word associations.

SELF-TESTS (Review & wRite)



Completing the following SELF-TESTS will provide immediate feedback on how well you have mastered the material. In the *fill-in exercises*, write the appropriate word or words in the blank spaces. The *matching exercise* requires you to match the terms in one column to their correct definitions in the other. For the *multiple-choice questions* in Practice Tests I and II, circle or underline the correct answer. When you are unsure of any answer, be sure to highlight or specially mark the item and then go back to the text for further review. Correct answers are provided at the end of this study guide chapter.

FILL-IN EXERCISES

1. The traditional view of memory contains three distinct memory storage systems: the _____, _____, and _____ (p. 214).
2. Keeping information in STM by repeating or reviewing it is known as _____ (p. 217).
3. The capacity of STM can be improved by _____ (p. 218).
4. You will be more likely to retrieve information if you think about it and relate it to information already in LTM. This process is known as the _____ approach (p. 220).
5. A part of LTM that moves information in and out of STM and works on processing information is known as _____ memory (p. 220).
6. Factual information is stored in _____ memory; whereas memories for events are stored in _____ memory (p. 223).
7. Taking a multiple-choice test requires use of the _____ retrieval strategy; whereas an essay test requires use of the _____ strategy (p. 225).
8. _____ explains why we remember things at the end of a list but forget things in the middle (p. 232).
9. The decay theory suggests that forgetting is largely due to _____ (p. 235).
10. Memory strategies that help organize or “tag” information are called _____ (p. 243).

MATCHING EXERCISES

Column A

Column B

- | | |
|---------------------------|--|
| a. Distributed Practice | 1. ___ Visual and verbal input channels of STM. |
| b. Motivated Forgetting | 2. ___ Memory improved with matching emotional states. |
| c. Retrieval | 3. ___ Progressive mental deterioration with severe memory loss. |
| d. Eidetic imagery | 4. ___ Repeated firing of neurons during memory processing. |
| e. Mnemonic device | 5. ___ Short study sessions mixed with rest periods. |
| f. Alzheimer's Disease | 6. ___ Photographic memory. |
| g. Reverberating Circuits | 7. ___ Enzymes involved in long-term potentiation. |
| h. Kinases | 8. ___ Method of loci. |
| i. State Dependent Memory | 9. ___ Forgetting painful or embarrassing information. |
| j. Dual-Coding System | 10. ___ Process of getting information out of LTM. |

PRACTICE TEST I

1. A visual image in sensory memory _____.
 - a. lasts about 1/2 second
 - b. lasts longer than sounds remain in this stage
 - c. contains only the image that has been selected for our attention
 - d. is always processed into STM

2. Short-term memory is sometimes called _____.
 - a. mental imaging
 - b. present memory
 - c. brief memory
 - d. working memory

3. Maintenance rehearsal _____.
 - a. causes consolidation
 - b. prevents chunking
 - c. re-enters information in sensory memory
 - d. re-enters information in STM

4. The "cocktail party phenomenon" is related to _____.
 - a. sensory memory
 - b. memory loss due to alcoholism
 - c. selective attention
 - d. deliberate rehearsal

Study and Review Guide

5. Chunking enables a person to _____.
 - a. select contents from sensory memory
 - b. organize contents of STM
 - c. organize contents of LTM
 - d. use dual coding in sensory memory

6. Visual and verbal coding occurs in the _____ stage, and is called the _____ system.
 - a. LTM; optical-auditory
 - b. sensory memory; sensory
 - c. perceptual memory; sensory
 - d. STM; dual-coding

7. Facts are stored in _____.
 - a. sensory memory
 - b. STM
 - c. semantic memory
 - d. episodic memory

8. Landmark events enable us to locate information in _____.
 - a. semantic memory
 - b. episodic memory
 - c. sensory memory
 - d. STM

9. Which of the following is a recognition test of memory?
 - a. remembering a name that goes with a face
 - b. a multiple choice test
 - c. an essay test
 - d. reciting the names of the state capitals

10. Research on flashbulb memories has found that _____.
 - a. once a memory is stored in LTM, it is not changed
 - b. stored memories can be modified before or after consolidation
 - c. inferences or assumptions are not added to information with a strong emotional impact
 - d. if a memory is vivid, it is an accurate account of the original experience

11. According to the decay theory of forgetting, we are unable to remember information when it _____.
 - a. has been replaced with newer information
 - b. has deteriorated with the passage of time
 - c. has a negative emotional impact
 - d. was learned in an emotional state different from the state we are in when trying to remember it

Study and Review Guide

12. If during a French test in college, you remember some Spanish words you learned in high school, these previously learned words would be causing _____ interference.
 - a. retroactive
 - b. proactive
 - c. chunking
 - d. semantic

13. The activity of reverberating circuits is believed to account for the qualities of _____.
 - a. sensory memory
 - b. STM
 - c. LTM
 - d. photographic memory

14. A relatively permanent change in the structure of dendrites and their sensitivity to excitatory stimulation that transfers STM into LTM is called _____.
 - a. long-term potentiation
 - b. an excitatory post-synaptic potential
 - c. reverberating circuits
 - d. the process of neuron transformation

15. Alfredo was unable to remember the events occurring just before his automobile accident. This memory loss from brain trauma is known as _____ amnesia.
 - a. anterograde
 - b. retrograde
 - c. proactive
 - d. retroactive

16. Electroconvulsive shock prevents _____.
 - a. the operation of sensory memory
 - b. selection of information from sensory memory
 - c. transfer of information from STM to LTM
 - d. retrograde amnesia

17. The patient H. M. was unable to consolidate information from STM after surgical removal of portions of his _____.
 - a. occipital lobes
 - b. subcortex
 - c. frontal lobes
 - d. temporal lobes

Study and Review Guide

18. In Alzheimer's disease, the amount of _____ produced by brain tissue is decreased.
- cerebrospinal fluid
 - hydrochloric acid
 - dopamine
 - acetylcholine
19. _____ memory enables a person to store a complete visual image rather than the limited amount of information normally selected for attention in STM.
- Flashbulb
 - Photographic
 - Mnemonic
 - Long term
20. The method of loci mnemonic system uses _____ to organize information to be learned.
- images of physical locations
 - substitute words
 - images of objects to represent numbers
 - numbers

PRACTICE TEST II

1. This type of memory has a large capacity and short duration.
- semantic
 - sensory
 - short-term
 - working
2. Short-term memory receives information from sensory memory and from _____.
- long-term memory
 - working memory
 - the perceptual processing network
 - maintenance rehearsal
3. Maintenance rehearsal and the transfer of information into long-term memory are prevented by _____.
- mnemonics
 - reverberating circuits
 - the process of selective attention
 - an interference task

Study and Review Guide

4. The process that allows us to store more information in short-term memory by grouping information into units is called _____.
 - a. maintenance rehearsal
 - b. collective organization
 - c. chunking
 - d. proximal closure

5. Dual-coding involves the _____ systems.
 - a. verbal and visual
 - b. chemical and electrical sensory
 - c. body-based and brain-based sensory
 - d. semantic and episodic memory

6. The levels of processing approach suggests that we will remember information better if we _____.
 - a. spend more time processing it visually
 - b. spend more time processing it verbally
 - c. spend equal time processing it verbally and visually
 - d. process it at a deeper level

7. Baddeley believes there are three parts to working memory: short-term visual storage, short-term verbal storage, and _____.
 - a. chunking
 - b. brief sensory storage
 - c. an executive control
 - d. short-term perceptual storage

8. One reason long-term memory is not accurate is that _____ is (are) selected for storage, rather than the exact physical form.
 - a. surface features
 - b. the underlying meaning
 - c. a prototype
 - d. event markers

9. When something unlocks a rapid chain of memories, _____ has occurred.
 - a. a flashback
 - b. a flashbulb memory
 - c. redintegration
 - d. the Zeigarnik effect

Study and Review Guide

10. Relearning occurs when it takes _____ to regain lost information.
 - a. longer
 - b. less time
 - c. more trials
 - d. the same number of trials or amount of time

11. The unconscious resolution of a problem is known as _____.
 - a. the Zeigarnik effect
 - b. an insight
 - c. redintegration
 - d. the Eureka experience

12. False childhood memories are _____ to construct in laboratory studies.
 - a. relatively easy
 - b. unethical
 - c. impractical
 - d. almost impossible

13. Memory research suggests that, in comparison to literate cultures, preliterate cultures _____.
 - a. have better short-term, but worse long-term memory abilities
 - b. are better at face-recognition memory tasks
 - c. demonstrate better recall for orally presented stories
 - d. are not affected by the recency effect

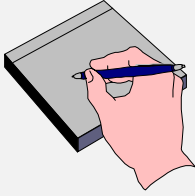
14. The _____ effect suggests that people will recall information presented at the beginning and end of a list better than information from the middle of a list.
 - a. recency
 - b. serial position
 - c. latency
 - d. primacy

15. The evolutionary view suggests that selective attention and _____ are important to survival.
 - a. the Zeigarnik effect
 - b. state-dependent memory
 - c. repression of traumatic memories
 - d. the primacy effect

16. Acetylcholine and _____ are associated with the process of converting STM to LTM.
 - a. epinephrine
 - b. adrenaline
 - c. glutamate ions
 - d. kinase enzymes

Study and Review Guide

17. New memories are thought to be formed in the parahippocampal cortex and the _____.
a. neocortex
b. limbic system
c. prefrontal cortex
d. all of these options
18. Alzheimer's disease is characterized by _____.
a. sudden memory loss
b. progressive mental deterioration with severe memory loss
c. gradual memory loss without deterioration in other mental functioning
d. gradual and severe memory loss accompanied by physical deterioration
19. The method of loci, peg-word system, and substitute word system are all _____ mnemonic devices.
a. visually organized
b. verbally organized
c. complex
d. moderately effective
20. When you want to remember a series of words or facts in their appropriate sequence, it would be best to use the mnemonic device called the _____.
a. peg-word system
b. method of loci
c. method of word association
d. substitute word system



ANSWERS

The following answers to active learning exercises, fill-ins, matching exercises, and practice tests 1 and 2 provide immediate feedback on your mastery of the material. Try not to simply memorize the answers. When you are unsure of your “guess” or make an error, be sure to go back to the textbook and carefully review. This will greatly improve your scores on classroom exams and quizzes.

FILL-IN EXERCISES

1. sensory memory, short-term memory (STM), long-term memory (LTM); 2. maintenance rehearsal; 3. chunking; 4. levels of processing; 5. working; 6. semantic, episodic; 7. recognition, recall; 8. serial position effect; 9. biological decay over time; 10. mnemonics.

MATCHING EXERCISES

a. 5, b. 9, c. 10, d. 6, e. 8, f. 3, g. 4, h. 7, i. 2, j. 1.

<u>PRACTICE TEST I</u>		<u>PRACTICE TEST II</u>	
1. a (p. 215)	11. b (p. 235)	1. b (p. 215)	11. a (p. 226)
2. d (p. 214)	12. b (p. 235)	2. a (pp. 217, 220)	12. a (p. 228)
3. d (p. 217)	13. b (p. 237)	3. d (p. 217)	13. c (p. 230)
4. c (p. 216)	14. a (p. 237)	4. c (p. 218)	14. b (p. 232)
5. b (p. 218)	15. b (p. 240)	5. a (p. 219)	15. b (p. 235)
6. d (p. 219)	16. c (p. 240)	6. d (p. 220)	16. d (pp. 238-39)
7. c (p. 223)	17. d (p. 240)	7. c (p. 220)	17. c (p. 239)
8. b (p. 223)	18. d (p. 241)	8. b (p. 222)	18. b (p. 241)
9. b (p. 226)	19. b (p. 243)	9. c (p. 224)	19. a (p. 243)
10. b (p. 227)	20. a (p. 243)	10. b (p. 226)	20. a (p. 244)

Chapter

7

Thinking,
Language, and
Intelligence

OUTLINE (Survey & Question)

This outline is intended to help you *survey* the chapter. As you read through the various sections, write down any *questions* or comments that come to mind in the space provided. This is a valuable part of active learning and the SQ4R method. It not only makes your reading time more enjoyable and active, but it also increases retention and understanding of the material.

TOPIC

NOTES

I. THINKING

- A. How Do We Think? Pictures and Words
- B. Concepts: How We Organize Knowledge
- C. Problem Solving: Moving from a Given State to a Goal State
- D. Creativity: Finding Unique Solutions to Problems
- E. Research Highlight: Electronic Brainstorming

F. Active Learning: Solving Everyday Problems

II. LANGUAGE

A. Language and Thought: A Complex Interaction

B. Animals and Language: Can We Talk to the Animals?

III. INTELLIGENCE AND INTELLIGENCE TESTING

A. Intelligence Defined: More Difficult Than It Seems

B. Measuring Intelligence: What Constitutes a Good Test?

C. IQ Tests: Predictors of School Performance

D. Gender and Cultural Diversity: The Bell Curve Debate

E. Differences in Intelligence: How We Are Different

F. Brain Efficiency: Why Are Some Brains More Intelligent Than Others?

G. Heredity versus Environment: Which Determines Intelligence?



LEARNING OBJECTIVES (Read, Recite & wRite)

While *reading* the chapter, stop periodically and *recite* (or repeat in your own words) the answers to the following learning objectives. It will also help your retention if you *write* your answer in the space provided. (Page numbers refer to the text Psychology in Action, 5th Ed.)

1. Define cognition and thinking (pp. 252-253).
2. Describe the dual-coding hypothesis for information processing; discuss the use of mental imagery and propositions in cognition (pp. 253-254).
3. Define concepts, and explain the hypothesis-testing theory and prototype theory for concept formation (pp. 254-256).
4. List and describe the three stages of problem solving, including an explanation of the types of thinking that occur in each stage (pp. 257-259).
5. List and describe the two major barriers to problem solving; discuss the role of incubation in overcoming these barriers (pp. 260-262).
6. Define creativity, and discuss how each of the following is related to the creative process: brainstorming, convergent and divergent thinking, and the investment theory of creativity (pp. 262-266).
7. Define human language and explain why it is different than other patterns of communication used by non-humans (p. 266).

Study and Review Guide

8. Define and provide an example of each of the following building blocks of language: phonemes, morphemes, grammar, syntax, semantics, and pragmatics (pp. 267-268).
9. Describe the reference, definitional, and prototype theories for language comprehension (p. 269).
10. Describe the research on teaching language to animals, and summarize each side of the “animal language” debate (pp. 269-271).
11. Explain why intelligence is difficult to define, and differentiate between Cattell’s fluid and crystallized intelligence (pp. 271-273).
12. Describe Gardner’s theory of multiple intelligences and Sternberg’s triarchic theory of successful intelligence. State the textbook’s definition of intelligence (pp. 273-275).
13. Define standardization, reliability, and validity, and explain why each is important for intelligence testing (pp. 275-277).
14. Explain how an intelligence quotient (IQ) is determined and differentiate between the Stanford-Binet Intelligence Test, the Wechsler intelligent tests, and group IQ tests (pp. 277-280).
15. Describe how IQ tests can be abused or misused, and discuss the factors that can influence IQ scores (pp. 280-281).
16. Describe the effects of age on intelligence, and discuss the extremes of mental retardation and mental giftedness (pp. 282-283).

17. Explain the concepts of brain efficiency and neural pruning in relationship to intelligence (pp. 284-285).

18. Discuss the effects of heredity and the environment on intellectual development, including a summary of the Minnesota Study of Twins Reared Apart and its impact on the nature versus nurture debate regarding IQ (pp. 285-286).



KEY TERMS (Review)

The *review* step in the SQ4R method is very important to your performance on quizzes and exams. Upon completion of this chapter, you should be able to define the following terms.

Algorithm: _____

Attributes: _____

Brain Efficiency: _____

Brainstorming: _____

Cognition: _____

Concept: _____

Study and Review Guide

Convergent Thinking: _____

Creativity: _____

Crystallized Intelligence: _____

Divergent Thinking: _____

Dual-Coding Hypothesis: _____

Evaluation: _____

Fluid Intelligence: _____

Functional Fixedness: _____

Grammar: _____

Heuristics: _____

Study and Review Guide

Hypothesis-Testing Theory: _____

Human Language: _____

Incubation: _____

Intelligence: _____

Intelligence Quotient (IQ): _____

Investment Theory of Creativity: _____

Mental Images: _____

Morpheme: _____

Neural Pruning: _____

Phoneme: _____

Pragmatics: _____

Study and Review Guide

Preparation: _____

Problem Solving: _____

Problem-Solving Set: _____

Production: _____

Proposition: _____

Prototype: _____

Prototype Theory: _____

Reliability: _____

Semantics: _____

Standardization: _____

Study and Review Guide

Syntax: _____

Theory of Multiple Intelligences: _____

Triarchic Theory of Intelligence: _____

Thinking: _____

Validity: _____



ACTIVE LEARNING EXERCISES (Recite)

The *recite* step in the SQ4R method requires you to be an ACTIVE learner. By completing the following exercises, you will test and improve your mastery of the chapter material, which will also improve your performance on quizzes and exams. Answers to some exercises appear at the end of this study guide chapter.

ACTIVE LEARNING EXERCISE I

The text describes two major ways to generate hypotheses during the production stage of problem solving—algorithms and heuristics.

To improve your algorithm strategy, try the following:

There are 1025 tennis players participating in a single's elimination tournament. How many matches must be played before there is one winner and 1024 losers?

To work on your skill in “working backwards” (a type of heuristic), try this problem:

Study and Review Guide

While three watchmen were guarding an orchard, a thief crept in and stole some apples. During his escape, he met the three watchmen one after the other. In exchange for his freedom, he gave each one-half of the apples he had at the time, plus an extra two. After he had shared his apples with each of the three watchmen, he had one left for himself. How many apples had he stolen originally?

Answers can be found at the end of this study guide chapter.

ACTIVE LEARNING EXERCISE II

Metacognition (A Cognitive Skill)

Metacognition, also known as reflective or recursive thinking, involves a review and analysis of your own mental processes-- thinking about your own thinking. Below is a problem that involves this type of active learning. Take a few minutes and work on it.

Problem

There is a bird, Tweety, that likes to perch on the roof of Casey Jones, a locomotive that travels the 200-mile route from Cucamonga to Kalamazoo. As Casey Jones pulls out from Cucamonga, the bird takes to the air and flies to Kalamazoo, the train's destination. Because the train travels at only 50 mph whereas the bird travels at 100 mph, Tweety reaches Kalamazoo before the train and finds that it has nowhere to perch. So the bird flies back to the train and finds it still moving, whereupon Tweety flies back to Kalamazoo, then back to the train, and so on until Casey Jones finally arrives in Kalamazoo, where the bird finally rests on the locomotive's roof. How far has the bird flown?

This exercise helps apply what you've learned in your textbook about steps involved problem solving. To review these steps, fill in the name of the step, then describe the processes you used during each step in solving the above problem. Make sure you include the following terms, if applicable:

algorithm	creating subgoals	evaluation
goal	heuristics	hypothesis
incubation	preparation	production

Step 1: _____

Procedure: _____

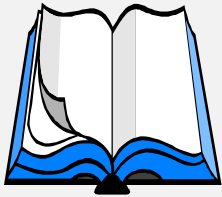
Study and Review Guide

Step 2: _____

Procedure: _____

Step 3: _____

Procedure: _____



CHAPTER OVERVIEW (Review)

The following CHAPTER OVERVIEW provides a narrative overview of the main topics covered in the chapter. Like the Visual Summary found at the end of each chapter in the text, this narrative summary provides a final opportunity to *review* chapter material.

I. Thinking Cognition refers to the process of "coming to know." It is a process of gathering and processing information that includes sensation, perception, learning, memory, thinking, and problem solving.

Thinking is the mental manipulation of information that has been gathered and processed. It involves creating mental images, forming concepts, solving problems, and using language. There is some

controversy regarding how we think, but the latest evidence supports a dual-coding theory with both an imagery system and a verbal system.

Mental images are mental representations of objects and events. Concepts are ideas or notions about groups of objects or situations that share similar characteristics known as attributes. There are two major theories of concept formation: The hypothesis-testing theory says we focus on an attribute, hypothesize how it contributes to the concept, and test our hypothesis. The prototype theory says we compare new items to a prototype ("best example") of a concept.

II. Problem Solving There are three major steps in problem solving: preparation, production, and evaluation. During the production stage, possible situations, called hypotheses, are generated. We typically generate hypotheses by using algorithms and heuristics.

Algorithms, as problem solving strategies, eventually lead to a solution, but they are not practical in most situations. Heuristics, or rules of thumb based on experience with similar problems, are much faster but do not always produce a solution. Three common heuristics are means-end analysis, working backward, and creating subgoals.

Among the barriers to successful problem solving are problem solving set and functional fixedness. Some problems require a period of incubation, or time out, before a solution is apparent.

III. Creativity Creativity is the ability to originate new or unique solutions to a problem that are also practical and useful. J. P. Guilford has identified two distinct types of creative thinking: convergent, in which the person works toward a single solution to a problem; and divergent, in which the person tries to generate as many solutions as possible. Brainstorming is an example of divergent thinking.

The investment theory of creativity proposes that creative people "buy low" by pursuing promising but unpopular ideas and "sell high" by developing the ideas until they are widely accepted, then starting over with new unaccepted ideas. It also proposes that successful creative people have optimal elements of six different resources: intellectual abilities, knowledge, style of thinking, personality, motivation, and environment.

IV. Language Language is a creative form of communication consisting of symbols put together according to a set of rules. Phonemes are the basic speech sounds; they are combined to form morphemes, the smallest meaningful units of language. Phonemes, morphemes, words, and phrases are put together by rules of grammar (syntax and semantics).

Syntax refers to the grammatical rules for ordering words in sentences; semantics refers to meaning in language. Whenever we use language, we take pragmatics into account---the appropriateness of the message, the vocabulary, sentence structure, and delivery to the intended audience and situation.

Noam Chomsky believes that humans are born with an ability to put words together in a meaningful way. Also according to Chomsky, every sentence has both a surface structure (the words themselves) and a deep structure (the actual meaning).

Researchers have investigated animals' ability to learn human or humanlike language. The most successful of these studies have been done with apes using American Sign Language. In another successful study, dolphins were taught to comprehend sentences that varied in syntax and meaning. Although many psychologists believe that animals can truly learn a human language, skeptics suggest the animals are being trained merely to respond for rewards.

V. Intelligence Ever since research into intelligence began, theorists have differed in their definitions. Charles Spearman viewed intelligence as “g,” a general cognitive ability. L. L. Thurstone viewed it as seven distinct mental abilities, while J. P. Guilford viewed it as 120 or more separate abilities. Raymond Cattell viewed intelligence as two types of “g” that he called fluid intelligence and crystallized intelligence.

Gardner has identified eight different types of intelligence in which people can excel; he feels both teaching and assessing should take into account people's learning styles and cognitive strengths. Sternberg's triarchic theory of intelligence emphasizes the thinking process rather than the end product (the answer). The triarchic theory of successful intelligence identifies three aspects of intelligence: internal components, use of these components to adapt to changes, and application of past experience to solve problems and achieve societal goals.

Our definition of intelligence is: Intelligence consists of the cognitive abilities employed in acquiring, remembering, and using knowledge of one's culture to solve everyday problems and to readily adapt to and function in both changing and stable environments.

For any test to be useful, it must be standardized, reliable, and valid. Standardization refers to (a) giving a test to a large number of people to develop norms and (b) using identical procedures in administering a test so that everyone takes the test under the same conditions. Reliability refers to the stability of test scores over time. Validity refers to how well the test measures what it is intended to measure.

VI. Intelligence Testing IQ tests do not, and are not intended to, measure overall intelligence. Rather, they are designed to measure verbal and quantitative abilities needed for school success. Several individual IQ tests are in common use. The Stanford-Binet measures primarily verbal abilities of children ages 3 to 16. The Wechsler tests, consisting of three separate tests for three distinct age levels, measure both verbal and nonverbal abilities.

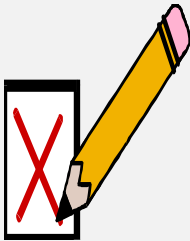
Lowered school success for many children can be traced to lack of school readiness and language barriers. Governmental programs such as Head Start combat lowered success potential by providing early education for low-income children.

As we age, there is no decline in our intellectual abilities except for cognitive speed. People with IQs of 70 and below are identified as mentally retarded, while people with IQs of 140 and above are identified as gifted.

Brain efficiency refers to the amount of energy used by the brain to solve problems. The more efficient brain uses less energy to solve the same problem than the less efficient brain. Brain efficiency may be due to neural pruning, the decrease in the number of synapses after age 5.

According to the Minnesota Study of Twins Reared Apart, heredity and environment appear to be equally important in intellectual development. Heredity equips each of us with innate capacities, but the environment significantly influences whether an individual will reach full potential.

SELF-TESTS (Review & wRite)



Completing the following SELF-TESTS will provide immediate feedback on how well you have mastered the material. In the *fill-in exercises*, write the appropriate word or words in the blank spaces. The *matching exercise* requires you to match the terms in one column to their correct definitions in the other. For the *multiple-choice questions* in Practice Tests I and II, circle or underline the correct answer. When you are unsure of any answer, be sure to highlight or specially mark the item and then go back to the text for further review. Correct answers are provided at the end of this study guide chapter.

FILL-IN EXERCISES

1. The use of knowledge that has been gathered and processed is known as _____ (p. 252).
2. According to the _____, information is coded via both an imagery system and a verbal system, each working independently (p. 253).
3. According to the _____, people focus on some attribute or attributes and formulate a tentative guess about how the attribute contributes to the concept (p. 255).
4. To solve a problem there are three major stages: _____, _____, and _____ (pp. 258-259).
5. J. P. Guilford would probably describe problem solving set and functional fixedness as lack of _____ (pp. 260, 261, 264).
6. Creativity is associated with _____ and this type of thinking is associated with _____ in problem solving (pp. 263-264).
7. The ability to gain new knowledge and to attack and solve novel problems is known as _____ (p. 273).
8. A measure of the consistency and stability of test scores when the test is readministered over a period of time is known as _____ (p. 277).
9. A ten-year-old child with a mental age of seven would have an IQ score of _____ (p. 278).
10. Some psychologists prefer the Wechsler to the Stanford-Binet intelligence test because the Wechsler test gives both a _____ and a _____ score (p. 280).

MATCHING EXERCISES

Column A

- a. Syntax
- b. Convergent Thinking
- c. Stanford-Binet
- d. Evaluation
- e. Neural Pruning
- f. Crystallized Intelligence
- g. Wechsler
- h. Fluid Intelligence
- i. Divergent Thinking
- j. Semantics

Column B

- 1. ____ Decrease in number of synapses after age five.
- 2. ____ Leads to many solutions.
- 3. ____ Meaning in language.
- 4. ____ Accumulation of knowledge over the life span.
- 5. ____ Order of words in a sentence.
- 6. ____ Ability to gain new knowledge and solve novel problems.
- 7. ____ Measures both verbal and nonverbal abilities.
- 8. ____ Primarily measures verbal abilities.
- 9. ____ Evaluating hypothesis for goal attainment.
- 10. ____ Leads to a single solution.

PRACTICE TEST I

1. This is the name for mental processes such as sensing, perceiving, learning, remembering, thinking, and using language.
 - a. recall
 - b. cognition
 - c. concept formation
 - d. ideas
2. A mental ____ is used to categorize things that share similar characteristics.
 - a. program
 - b. attribute
 - c. concept
 - d. image
3. In concept formation, ____ involves making a guess about how an attribute contributes to a concept, then checking the guess for consistency with the concept.
 - a. schematacizing
 - b. stereotyping
 - c. hypothesis-testing
 - d. prototyping
4. Preparation, production, and evaluation are the three major steps in _____.
 - a. problem solving
 - b. cognition
 - c. thinking
 - d. artificial intelligence

Study and Review Guide

5. What are the two major methods used in generating hypotheses for solving problems?
 - a. factor analysis and analysis of variance
 - b. insight and meditation
 - c. insight and deduction
 - d. algorithms and heuristics

6. Which of the following is an algorithm?
 - a. a fixed ratio reinforcement schedule
 - b. dream analysis
 - c. 3×10 is $10 + 10 + 10$
 - d. asking the smartest person in the class

7. _____ is the failure to solve a problem because of an inability to see novel uses for a familiar object.
 - a. Problem-solving set
 - b. Functional fixedness
 - c. Heuristics
 - d. Incubation

8. According to J. P. Guilford, which of the following are the three abilities associated with creativity?
 - a. fluency, vocabulary, experience
 - b. fluency, flexibility, originality
 - c. flexibility, heuristics, algorithms
 - d. originality, fluency, experience

9. _____ is the group problem solving technique in which the following rules are followed: 1) no criticism; 2) create as many solutions as possible; 3) encourage originality; 4) try to build on previous ideas.
 - a. Divergent thinking
 - b. Insight
 - c. Connectionism
 - d. Brainstorming

10. Benjamin Whorf proposed that _____.
 - a. language is not natural and must be learned
 - b. the structure of language can influence people's behavior
 - c. American Sign Language is not a natural language
 - d. language development is genetically predetermined

Study and Review Guide

11. The smallest meaningful unit of language is called a _____.
 - a. verbalization
 - b. morpheme
 - c. phoneme
 - d. deep structure

12. The capacity for acquiring new knowledge and solving new problems that is partially determined by biological factors is called _____ intelligence.
 - a. crystallized
 - b. fluid
 - c. general
 - d. specific

13. Most IQ tests are designed to _____.
 - a. measure general intelligence
 - b. measure achievement
 - c. predict academic grades
 - d. predict crystallized intelligence

14. Which of the following is an individual intelligence test?
 - a. Stanford-Binet
 - b. SAT
 - c. ACT
 - d. AFQT

15. Sternberg's triarchic theory of successful intelligence includes internal mental processes, adaptive behaviors, and the application of _____.
 - a. past experience in solving new problems
 - b. past and present knowledge to ongoing problems
 - c. fluid and crystallized knowledge to problem-solving
 - d. multiple intelligences to life experiences

16. If a test gives you the same score each time you take the test, that test would be _____.
 - a. reliable
 - b. valid
 - c. standardized
 - d. useless

17. Validity refers to the ability of a test to _____.
 - a. return the same score on separate administrations of the test
 - b. predict what it is designed to predict
 - c. avoid discrimination between different cultural groups
 - d. give a standard deviation of scores

Study and Review Guide

18. Which of the following persons would be most likely to have similar IQ test scores?
- identical twins raised apart
 - identical twins raised together
 - fraternal twins raised apart
 - brothers and sisters from the same parents
19. This is a true statement about the relationship between IQ scores and ethnicity.
- Members of every ethnic group have scores at all levels of the IQ scale.
 - The bell curve applies only to Caucasian test-takers.
 - Overall, the averages for all ethnic groups fall at the same level on the IQ scale.
 - Americans as a group consistently average higher IQ scores than other ethnic groups.
20. An IQ score of _____ is the cutoff for mental retardation, and an IQ score of _____ is the cutoff for mental giftedness.
- 50; 100
 - 70; 140
 - 80; 120
 - none of these options; these terms are no longer being used

PRACTICE TEST II

1. Thinking, problem solving, sensation, perception, learning, and memory are all _____ processes.
- emotional
 - motivational
 - cognitive
 - psychobiological
2. A mental image is defined as a _____.
- delusion
 - illusion
 - hallucination
 - mental representation of something that is not present
3. In psychology, a _____ is the smallest unit of knowledge that can be validated as true or false.
- psychological truism
 - proposition
 - mental image
 - cognition

Study and Review Guide

4. When first learning a new concept, it is better to have _____ relevant facts and _____ irrelevant facts about that concept.
 - a. few; few
 - b. few; more
 - c. more; few
 - d. more; more

5. The generation of possible solutions should occur during the _____ stage(s) of problem solving.
 - a. preparation
 - b. production
 - c. preparation and production
 - d. evaluation

6. Educated guesses based on prior experience that generally lead to a solution are called _____.
 - a. heuristics
 - b. hunches
 - c. hypotheses
 - d. musings

7. _____ is (are) an example of an educated guess that generally leads to a solution.
 - a. Means-end analysis
 - b. Mnemonic devices
 - c. Algorithms
 - d. all of these options

8. Evaluation is the _____ stage in problem solving.
 - a. first
 - b. second
 - c. next to last
 - d. last

9. With regard to problem solving, incubation is _____.
 - a. the generation of possible solutions
 - b. a period of time when active work on the problem is set aside
 - c. an evaluation of the results of the applied solution
 - d. wasted time

10. Creativity is the ability to solve problems in a _____ and practical or useful manner.
 - a. timely
 - b. complex
 - c. unique
 - d. simple

Study and Review Guide

11. Brainstorming is more effective when groups are told to _____.
 - a. ignore their creativity
 - b. generate more practical ideas and fewer unusual ones
 - c. generate as many practical and unusual ideas as possible
 - d. ignore what others have already suggested

12. Simple, ritualistic communication that is evoked by specific stimuli and consists of a limited repertoire of sounds or movements is characteristic in _____.
 - a. animals
 - b. preliterate cultures
 - c. human toddlers and animals
 - d. non-mammalian species

13. Chomsky is to deep structure as Freud is to _____.
 - a. surface structure
 - b. manifest content
 - c. consciousness
 - d. latent content

14. “A screaming bouquet of flowers” is an example of the improper use of _____.
 - a. pragmatics
 - b. schematics
 - c. semantics
 - d. morphemes

15. The _____ theory of language suggests that we understand the meaning of a communication by comparing it with a real-world experience.
 - a. hypothesis-testing
 - b. reference
 - c. prototype
 - d. mental imaging

16. Spearman believed that intelligence was composed of a general cognitive ability, which he called _____.
 - a. “g”
 - b. IQ
 - c. GCA
 - d. “I”

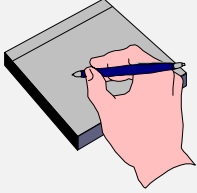
Study and Review Guide

17. Cattell proposed that there were two types of intelligence: one that referred to new knowledge and one that referred to accumulated knowledge. He called these _____.
 - a. knowledge and wisdom
 - b. novel and fixed knowledge
 - c. fluid and crystallized intelligence
 - d. working and stored information

18. Linguistic, logical, spatial, musical, and interpersonal are five of Gardner's eight multiple intelligences. The other three include _____.
 - a. sensory, perceptual, and memory
 - b. emotional, affective, and limbic
 - c. vestibular, auditory, and parietal
 - d. kinesthetic, intrapersonal, and naturalistic

19. _____ is (are) the term used for developing specific procedures for administering and scoring a test, and establishing norms for the test scores in a given population.
 - a. Reliability procedures
 - b. Validity testing
 - c. Specification
 - d. Standardization

20. Research has found that _____ is a better predictor of college grades than either SAT or ACT scores.
 - a. intrinsic motivation
 - b. high school grade point average
 - c. enthusiasm for learning
 - d. extrinsic motivation



ANSWERS

The following answers to active learning exercises, fill-ins, matching exercises, and practice tests 1 and 2 provide immediate feedback on your mastery of the material. Try not to simply memorize the answers. When you are unsure of your “guess” or make an error, be sure to go back to the textbook and carefully review. This will greatly improve your scores on classroom exams and quizzes.

ACTIVE LEARNING EXERCISE I

Algorithm answer 2 players = 1 match, 3 players = 2 matches, 4 players = 5 matches, and so on. The number of required matches is one less than the number of players, so it will take 1024 matches to select a winner.

Working backward—a heuristic answer The thief had one apple after sharing with the third watchman. After sharing with the second watchman, he had 6 apples ($1/2 \times 2 = 1$, $X = 6$). After sharing with the first watchman, he had 16 ($1/2 \times 2 = 16$, $x = 36$). The thief stole 36 apples.

FILL-IN EXERCISES

1. thinking; 2. dual-coding hypothesis; 3. hypothesis-testing theory; 4. preparation, production, and evaluation; 5. flexibility; 6. Divergent thinking, fluency; 7. fluid intelligence; 8. reliability; 9. 70; 10. verbal, nonverbal.

MATCHING EXERCISES

a. 5, b. 10, c. 8, d. 9, e. 1, f. 4, g. 7, h. 6, i. 2, j. 3.

Study and Review Guide

<u>PRACTICE TEST I</u>		<u>PRACTICE TEST II</u>	
1. b (p. 252)	11. b (p. 267)	1. c (p. 252)	11. b (p. 263)
2. c (p. 254)	12. b (p. 273)	2. d (p. 253)	12. a (p. 266)
3. c (p. 255)	13. c (p. 277)	3. b (p. 253)	13. d (pp. 267, 251)
4. a (p. 257)	14. a (p. 277)	4. c (p. 256)	14. c (p. 268)
5. d (p. 288)	15. a (p. 274)	5. b (p. 258)	15. b (p. 269)
6. c (p. 258)	16. a (p. 277)	6. a (p. 258)	16. a (p. 273)
7. b (p. 261)	17. b (p. 277)	7. a (p. 258)	17. c (p. 273)
8. b (pp. 263-64)	18. b (p. 286)	8. d (p. 259)	18. d (pp. 273-74)
9. d (pp. 262-63)	19. a (p. 278)	9. b (p. 261)	19. d (pp. 275-76)
10. b (p. 266)	20. b (p. 282)	10. c (p. 262)	20. b (p. 280)

Chapter

8

Life Span
Development I

OUTLINE (Survey & Question)

This outline is intended to help you *survey* the chapter. As you read through the various sections, write down any *questions* or comments that come to mind in the space provided. This is a valuable part of active learning and the SQ4R method. It not only makes your reading time more enjoyable and active, but it also increases retention and understanding of the material.

TOPIC

NOTES

I. STUDYING DEVELOPMENT

- A. Theoretical Issues: Ongoing Debates

- B. Research Methods: Two Basic Approaches

- C. Gender and Cultural Diversity: Cultural Psychology's Guidelines for Developmental Research

II. PHYSICAL DEVELOPMENT

- A. Prenatal Development: From Conception to Birth

B. Early Childhood Physical Development: Brain, Motor, and Sensory/Perceptual Development

C. Physical Changes in Adolescence: A Time of Rapid Development

D. Physical Changes in the Adult Years: A Time of Gradual Development

III. LANGUAGE DEVELOPMENT

A. Stages of Language Development: From Crying to Talking

B. Theories of Language Development: Nature versus Nurture

IV. SOCIAL-EMOTIONAL DEVELOPMENT

A. Attachment in Infancy: The Beginnings of Love

B. Adult Attachment: Infancy Patterns and Adult Intimacy

V. COGNITIVE DEVELOPMENT

A. Stages of Cognitive Development: Birth to Adolescence

B. Assessing Piaget's Theory: Criticisms and Contributions

C. Information Processing: A Computer Model of Cognition

D. Research Highlight: Getting Old May Be Better than You Think



LEARNING OBJECTIVES (Read, Recite & wRite)

While *reading* the chapter, stop periodically and *recite* (or repeat in your own words) the answers to the following learning objectives. It will also help your retention if you *write* your answer in the space provided. (Page numbers refer to the text Psychology in Action, 5th Ed.)

1. Define developmental psychology, and discuss the ongoing debates in this field regarding nature versus nurture, continuity versus stages, and stability versus change (pp. 292-293).
2. Differentiate between cross-sectional and longitudinal research, and describe the major advantages and disadvantages of each method of research (pp. 293-295).
3. Discuss four ways culture has an impact on the study of human development (pp. 295-296).
4. List and describe the physical changes associated with the three stages of prenatal development (pp. 297-298).
5. Discuss the effects of maternal nutrition and exposure to teratogens on prenatal development, and describe paternal contributions to prenatal development (pp. 299-300).
6. Describe the major changes in brain, motor, and sensory/perceptual development during the early childhood years; explain how these changes have been measured in newborns and infants (pp. 300-304).

Study and Review Guide

7. Define puberty and adolescence, list the major physical changes that occur during this developmental period, and explain how these changes may affect psychological adjustment (pp. 304-305).
8. Define menopause and the male climacteric, and describe other physical changes associated with middle age and later adulthood (pp. 305-306).
9. Differentiate between primary and secondary aging, and explain the programmed and damage theories for primary aging (pp. 307-308).
10. Describe the characteristics found in the prelinguistic and linguistic stages of language development (pp. 308-309).
11. Discuss the nativist position regarding language development and contrast it with the position of the “nurturists” (pp. 309-310).
12. Define attachment, and describe the research related to both animal and human infant attachment, including Harlow’s contact comfort research with monkeys (pp. 311-312).
13. Describe Ainsworth’s levels of attachment, and discuss research regarding the relationship between infant attachment and adult love (pp. 312-314).
14. Discuss Piaget’s approach to cognitive development, and define schemas, assimilation, and accommodation (pp. 315-316).

15. List and describe the characteristics associated with Piaget's four stages of cognitive development (pp. 316-321).
16. Briefly discuss two major criticisms of Piaget's theory, and state the ongoing contribution of his theory in psychology (pp. 321-324).
17. Compare the information processing model of cognitive development to Piaget's theory; describe the development of attention and memory using the information processing model (pp. 324-326).
18. Discuss research regarding the effects of aging on adult information processing and memory (p. 325).



KEY TERMS (Review)

The *review* step in the SQ4R method is very important to your performance on quizzes and exams. Upon completion of this chapter, you should be able to define the following terms.

Accommodation: _____

Adolescence: _____

Adolescent Egocentrism: _____

Animism: _____

Study and Review Guide

Assimilation: _____

Attachment: _____

Babbling: _____

Chromosomes: _____

Cohort Effects: _____

Conception: _____

Concrete Operational Stage: _____

Conservation: _____

Cross-Sectional Method: _____

Developmental Psychology: _____

Egocentrism: _____

Study and Review Guide

Embryonic Period: _____

Fetal Alcohol Syndrome: _____

Fetal Period: _____

Formal Operational Period: _____

Gene: _____

Germinal Period: _____

Imprinting: _____

Information Processing Model: _____

Language Acquisition Device (LAD): _____

Longitudinal Method: _____

Study and Review Guide

Male Climacteric: _____

Maturation: _____

Menopause: _____

Myelination: _____

Object Permanence: _____

Overextension: _____

Overgeneralize: _____

Preoperational Stage: _____

Primary Aging: _____

Puberty: _____

Reflexes: _____

Study and Review Guide

Schemas: _____

Secondary Aging: _____

Secondary Sex Characteristics: _____

Sensorimotor Stage: _____

Telegraphic Speech: _____

Teratogen: _____



ACTIVE LEARNING EXERCISES (Recite)

The *recite* step in the SQ4R method requires you to be an ACTIVE learner. By completing the following exercises, you will test and improve your mastery of the chapter material, which will also improve your performance on quizzes and exams. Answers to some exercises appear at the end of this study guide chapter.

ACTIVE LEARNING EXERCISE I

Chapter 8 opens with a discussion of research issues related to developmental psychology. To test your understanding of this material, try the following exercise:

Imagine yourself as a research psychologist who wants to answer the question, “Do feelings of attachment and marital happiness increase over time?” You conduct a longitudinal study of couples who’ve been married for 5 years, and then reexamine them when they’ve been married for 10 years. Your research finds couples who’ve been married only five years rank lowest on these measures, while the 10-year couples report increased levels of attachment and higher marital happiness. Before

submitting your paper to professional journals for possible publication, what factor(s) should you consider that might explain or contaminate your findings?

Possible answers appear at the end of this study guide chapter.

ACTIVE LEARNING EXERCISE II

Evaluating Arguments: The Pro-Life/Pro-Choice Controversy (A Cognitive Skill)

Evaluation of arguments is important to active learning and critical thinking. Rather than carelessly agreeing or disagreeing, critical thinkers analyze the relative strengths and weaknesses of each position and are especially sensitive to arguments with which they personally disagree. They recognize a common tendency to ignore or oversimplify opposing information. After carefully evaluating all arguments, a critical thinker develops an independent position.

A contemporary, controversial issue related to material in Chapter 8 is that of abortion. Those who support the pro-life position on abortion believe that abortion is morally and religiously wrong and oppose it in almost all circumstances. On the other side, pro-choice advocates believe the right to an abortion should not be dictated by religion or government, and is a matter of choice for the pregnant woman. To help sharpen your critical thinking skills in this area, try the following:

1. Begin by listing three "points" and three "counterpoints" for each argument. When these points and counterpoints are not explicitly stated, you will need to "read between the lines" and make your best guess.

Point

Counterpoint

_____	_____
_____	_____
_____	_____

2. After clarifying the points and counterpoints, use the following analytical tools to critique each side of the issue:

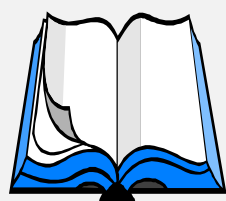
a. Differentiating between fact and opinion. The ability to recognize statements of fact versus statements of opinion is an important first step in successful analysis of arguments. After rereading the arguments regarding the pro-life/pro-choice issue, see if you can state at least two facts and two opinions on each side.

b. Recognizing logical fallacies and faulty reasoning. Several chapters in your text, and their corresponding critical thinking/active learning exercises can help you recognize faulty logic. For example, the problem of "incorrect assumption of cause/effect relationships" is discussed in Chapter 1 and the "incorrect and distorted use of statistics" is discussed in Appendix A.

c. Exploring the implications of conclusions. Questions can help expand your analysis of arguments (e.g., "What are the conclusions drawn by proponents of each side of the issue?" "Are there other logical alternative conclusions?").

d. Recognizing and evaluating author bias and source credibility. Also ask yourself questions (e.g., "What does the author want me to think or do?" "What qualifications does the author have for writing on this subject?" "Is the author a reliable source for information?").

Although each of these steps requires additional time and energy, the payoff is substantial. Such exercises not only refine your critical thinking skills, but also help make your decisions and opinions more educated and valuable.



CHAPTER OVERVIEW (Review)

The following CHAPTER OVERVIEW provides a narrative overview of the main topics covered in the chapter. Like the Visual Summary found at the end of each chapter in the text, this narrative summary provides a final opportunity to *review* chapter material.

I. Studying Development *Developmental psychology is concerned with describing, explaining, predicting, and modifying age-related behaviors across the entire life span. Three important research issues are nature or nurture, continuity or stages, and stability or change.*

Researchers in developmental psychology generally do cross-sectional (different participants of various ages at one point in time) or longitudinal studies (same participants over an extended period). Each method has its own advantages and disadvantages.

Cultural psychologists suggest that developmental researchers keep the following points in mind: Culture is the most important determinant of development, human development cannot be studied outside its socio-cultural context, culture is largely invisible to its participants, and each culture's ethnotheories are important determinants of behavior.

II. Physical Development *The prenatal period of development consists of three major stages: the germinal, embryonic, and fetal.*

Fetal development can be affected by environmental influences. Poor prenatal nutrition is a leading cause of birth defects, and most prescription and over-the-counter drugs are potentially teratogenic (capable of producing birth defects). Doctors advise pregnant women to avoid all unnecessary drugs, especially nicotine and alcohol.

During the prenatal period and the first year of life, the brain and nervous system grow faster than all other parts of the body. Early motor development (crawling, standing, and walking) is largely the result of maturation. The sensory and perceptual abilities of newborns are relatively well developed.

At puberty, the adolescent becomes capable of reproduction and experiences a sharp increase in height, weight, and skeletal growth because of the pubertal growth spurt.

Both men and women experience bodily changes in middle age. Many female changes are related to the hormonal effects of menopause; similar psychological changes in men are called the male climacteric.

Although many of the changes associated with physical aging (such as decreases in cardiac output and visual acuity) are the result of primary aging, others are the result of abuse, disuse, and disease---secondary aging. Physical aging may be genetically built-in from the moment of conception (programmed theory) or it may result from the body's inability to repair damage (wear-and-tear theory).

III. Language Development *Children go through two stages in their acquisition of language: prelinguistic (crying, cooing, babbling) and linguistic (which includes single utterances, telegraphic speech, and the acquisition of rules of grammar).*

Nativists believe that language is an inborn capacity and develops primarily from maturation. Noam Chomsky suggests that humans possess a language acquisition device (LAD) that needs only minimal environmental input. Nurturists emphasize the role of the environment and suggest that language development results from rewards, punishments, and imitating models

IV. Social-Emotional Development *Nativists believe that attachment is innate, whereas nurturists believe it is learned. The Harlow and Zimmerman experiments with monkeys raised by cloth or wire surrogate mothers found that contact comfort might be the most important factor in attachment.*

Infants who fail to form attachments may suffer serious effects. When attachments are formed, they may differ in level or degree. Research on securely attached, avoidant, and anxious/ambivalent children found significant differences in behaviors that may persist into adulthood.

V. Cognitive Development *Jean Piaget's theories of cognitive development are based on the concept of schemas, which are mental patterns or blueprints used to interpret the world.*

Sometimes existing schemas can be used "as is" and information is assimilated; on other occasions existing schemas must be modified, which calls for accommodation.

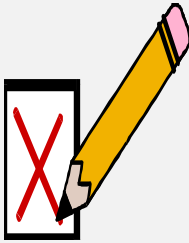
According to Piaget, cognitive development occurs in an invariant sequence of four stages: sensorimotor (birth to 2 years), preoperational (from 2 to 7 years), concrete operational (from 7 to 11 years), and formal operational (from 11 on).

In the sensorimotor stage, children acquire object permanence. During the preoperational stage, children are better equipped to use symbols, but their thinking is also egocentric and animistic.

In the concrete operational stage, children learn to perform operations (to think about concrete things while not actually doing them). They understand the principles of conservation and reversibility. During the formal operational stage, the adolescent is able to think abstractly and deal with hypothetical situations, but again, is prone to egotism. Although Piaget has been criticized for underestimating abilities and genetic and cultural influences, he remains one of the most respected psychologists in modern times.

Psychologists who explain cognitive development in terms of information processing have found this model especially useful in explaining attention and memory changes across the life span. In contrast to pessimistic early studies, recent research is much more encouraging about age-related changes in information processing.

SELF-TESTS (Review & wRite)



Completing the following SELF-TESTS will provide immediate feedback on how well you have mastered the material. In the *fill-in exercises*, write the appropriate word or words in the blank spaces. The *matching exercise* requires you to match the terms in one column to their correct definitions in the other. For the *multiple-choice questions* in Practice Tests I and II, circle or underline the correct answer. When you are unsure of any answer, be sure to highlight or specially mark the item and then go back to the text for further review. Correct answers are provided at the end of this study guide chapter.

FILL-IN EXERCISES

1. The branch of psychology that describes, explains, predicts, and sometimes aims to modify age-related behaviors from conception to death is known as _____ (p. 292).
2. The three major research issues in developmental psychology are the _____, the _____, and the _____ (pp. 292-293).
3. The _____ method examines individuals of various ages at one point in time and gives information about age differences; whereas the _____ method follows a single individual or group of individuals over an extended period of time and gives information about age changes (p. 293).
4. Environmental agents that can cause birth defects are known as _____ (p. 299).
5. Aging that results from disease, disuse, or abuse is known as _____ (p. 306).
6. _____ includes vowel sounds, while _____ adds consonants to the vowel sounds (p. 308).
7. In studies of attachment that employed the “strange situation” procedures, infants who used the mother as a safe base for exploration were called _____ (p. 313).
8. Taking in new information that easily fits an existing schema is known as _____; whereas _____ occurs when old schemas are changed to adapt to the new information (p. 316).
9. During the _____ stage of development, the child lacks operations and thinking is egocentric and animistic (p. 317).

10. Memory deficits in old age are primarily problems in _____ and _____ (p. 325).

MATCHING EXERCISES

Column A

Column B

- | | |
|-------------------------|--|
| a. Imaginary Audience | 1. ___ Attaching to first moving object. |
| b. Schemas | 2. ___ Egocentrism and animism. |
| c. Overextension | 3. ___ Adolescent belief that everyone is watching them. |
| d. Telegraphic Speech | 4. ___ Adding new information to an existing schema. |
| e. Puberty | 5. ___ Omitting unnecessary, connecting words. |
| f. Imprinting | 6. ___ A child saying "I goed to the store." |
| g. Assimilation | 7. ___ Language acquisition device (LAD). |
| h. Overgeneralization | 8. ___ A child calling a "bunny" a "dog." |
| i. Noam Chomsky | 9. ___ When sex organs become capable of reproduction. |
| j. Preoperational Stage | 10. ___ Cognitive structures for organizing ideas. |

PRACTICE TEST I

- Developmental psychologists are **NOT** interested in _____.
 - fetal well-being
 - age-related differences
 - age-related similarities
 - life after death
- Age at crawling, walking, and toilet training is primarily dependent on the _____.
 - educational level of the parents
 - specific training techniques of the child's caretakers
 - maturational readiness of the child
 - genetic influences inherited from both the mother and father
- In the area of child development, cultures have specific ideas and beliefs regarding how children should be trained. Such a set of ideas and beliefs is referred to as a(n) _____.
 - ethnotheory
 - cultural bias
 - ethnobiography
 - cohort effect

Study and Review Guide

4. A _____ is the most appropriate research method for studying age-changes across the life span.
 - a. case study
 - b. natural observation
 - c. longitudinal study
 - d. cross-sectional study

5. Conception occurs when a(n) _____.
 - a. fertilized egg implants in the uterine lining
 - b. ovum undergoes its first cell division
 - c. ejaculation occurs
 - d. sperm cell unites with an ovum

6. Rapid cell division from conception to two weeks is known as the _____ period.
 - a. fetal
 - b. germinal
 - c. embryonic
 - d. conceptual

7. Dennis was born with wide-set eyes, a thin upper lip, limb abnormalities, motor and growth retardation, and low intelligence. These characteristics are most often related to _____.
 - a. paternal alcoholism
 - b. fetal alcohol syndrome
 - c. Down's syndrome
 - d. retardive dyskinesia

8. At birth, an infant cannot _____.
 - a. see as well as an adult
 - b. recognize the taste or odor of its own mother's milk
 - c. feel pain
 - d. turn its head without help

9. The period of life when an individual first becomes capable of reproduction is known as _____.
 - a. the growth spurt
 - b. adolescence
 - c. puberty
 - d. the latency period

10. Menarche is the _____.
 - a. adolescent growth spurt
 - b. end of a woman's reproductive capacity
 - c. end of a man's reproductive capacity
 - d. onset of the menstrual cycle

Study and Review Guide

11. Menopause is _____.
 - a. another name for the onset of the menstrual cycle
 - b. a time of wild mood swings for all women due to fluctuations in hormones
 - c. the cessation of the menstrual cycle
 - d. the result of increases in estrogen levels

12. The physical and psychological changes associated with middle age in men are called the _____.
 - a. testosterone crisis
 - b. reproductive decline
 - c. male climacteric
 - d. male refractory period

13. "I goed to the zoo" and "I hurted myself" are examples of _____.
 - a. prelinguistic verbalizations
 - b. overexposure to adult "baby talk"
 - c. overgeneralization
 - d. Noam Chomsky's theory of language acquisition

14. According to the language theory of Noam Chomsky, _____.
 - a. children are born "prewired" to learn language
 - b. language development is primarily a result of rewards and modeling of adult speech
 - c. overgeneralizations of speech result from faulty development of the language acquisition device
 - d. language development cannot be determined

15. Harlow's research with infant monkeys and artificial surrogate mothers indicates that _____.
 - a. the most important factor in infant development is a loving environment
 - b. attachment is not essential to normal development
 - c. there is no significant difference in the choice of wire or terrycloth mothers
 - d. the most important variable in attachment may be contact comfort

16. According to Piaget, an infant acquires _____ when he or she understands that people and things continue to exist even when they cannot directly be seen, heard, or touched.
 - a. conservation
 - b. reversibility
 - c. egocentrism
 - d. object permanence

Study and Review Guide

17. Piaget used the term egocentrism to describe the fact that _____.
a. all children are naturally selfish during the first few years of life
b. children view the world from one perspective (their own)
c. the child's limited logic impedes his or her understanding of the need to share
d. children are unable to conserve
18. During Piaget's fourth stage of cognitive development, adolescents first become capable of _____.
a. egocentrism
b. dealing effectively with transformations
c. using language and other symbols
d. hypothetical thinking
19. Roberta refuses to go to school today because she's afraid everyone will notice that she is having a really bad hair day. Her fears most clearly illustrate _____.
a. formal operational thinking
b. peer pressure
c. adolescent egocentrism
d. adolescent ethnocentrism
20. The _____ approach to cognitive development draws an analogy between the mind and the computer.
a. human-machine system
b. information processing
c. mind-matter
d. bio-mechanical

PRACTICE TEST II

1. Maturation refers to development that occurs as a result of _____.
a. genetically determined signals
b. instinctive processes
c. homeostatic imbalances
d. an interaction between biology and environment
2. Today, the interactionist approach to development is supported by _____.
a. more nativists than empiricists
b. more empiricists than nativists
c. most psychologists
d. more psychiatrists than psychologists

Study and Review Guide

3. The development of physical and motor skills proceeds _____.
 - a. in leaps and bounds
 - b. in a relatively continuous manner
 - c. in discrete stages
 - d. instinctively

4. According to Greenfield, the best predictor of future behavior in a child is _____.
 - a. the parenting style of his or her parents
 - b. his or her intellectual capacity
 - c. the sociocultural context for that child
 - d. his or her health status

5. Environmental agents that can cause birth defects are called _____.
 - a. carcinogens
 - b. DNA disrupters
 - c. chromosomogens
 - d. teratogens

6. A child's brain reaches its full adult weight by _____ of age.
 - a. 16 months
 - b. 5 years
 - c. 10 years
 - d. 16 years

7. The physiological development that occurs between childhood and adulthood is called _____.
 - a. adolescence
 - b. puberty
 - c. the phallic stage
 - d. the identity stage

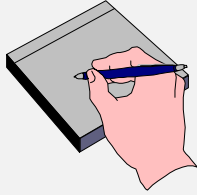
8. A boy who matures early is _____ likely than a girl who matures early to develop a positive body image.
 - a. a lot less
 - b. slightly less
 - c. just as
 - d. more

9. In the primary aging theory, it is believed that cells are genetically programmed to _____ once they reach the Hayflick limit.
 - a. die
 - b. stop reproducing
 - c. secrete destructive enzymes
 - d. destroy their own DNA

10. Which of the following is correctly matched?
- babbling = “oooo” and “aaaah”
 - cooing = “baa” and “daa-daa”
 - telegraphic speech = “No sit there”
 - prelinguistic = indistinguishable cries (cannot tell hunger from anger or pain)
11. By age _____ most children are capable of communicating adequately in their native language.
- 2
 - 5
 - 7
 - 8
12. Chomsky’s language acquisition device (LAD) is _____.
- a child’s inborn ability to learn language
 - a device given to deaf children to help them learn language despite their hearing loss
 - learned in infancy when parents use “baby talk” to stimulate its development
 - the ability of some children to acquire many languages easily
13. Which of the following is incorrectly matched?
- Lorenz = newly hatched geese will follow the first moving object they see (imprinting)
 - Bowlby = babies elicit caretaker nurturing
 - Harlow = contact comfort is more important than caretaking
 - all of these options are correctly matched
14. Ainsworth’s research suggests that a _____ infant is more likely to experience obsessive, possessive, and emotionally demanding adult relationships.
- securely attached
 - avoidant
 - anxious/ambivalent
 - demanding
15. Schemas are cognitive structures that contain organized ideas about the world and _____.
- expand or differentiate with experience
 - may assimilate new information
 - may accommodate new information
 - all of these options
16. According to Piaget, accommodation means that a schema has _____.
- been changed to fit new information
 - been used to understand new information
 - reversed itself
 - conserved itself

Study and Review Guide

17. Piaget's four stages of cognitive development start with the sensorimotor and preoperational stages, and end with the _____ stages.
- assimilation and accommodation
 - operation and abstraction
 - concrete and formal operational
 - concept testing and deductive reasoning
18. Egocentrism is present in which of Piaget's stages of cognitive development?
- preoperational and formal operational
 - preoperational only
 - sensorimotor and preoperational
 - sensorimotor only
19. A lack or loss of _____ is probably responsible for slower mental processing in young children and older adults.
- neurons
 - dendrite connections
 - myelination
 - acetylcholine
20. With regard to aging, loss of muscle strength and physical frailty are _____.
- inevitable
 - irreversible
 - greatly affected by improvements in exercise and good nutrition
 - all of these options



ANSWERS

The following answers to active learning exercises, fill-ins, matching exercises, and practice tests 1 and 2 provide immediate feedback on your mastery of the material. Try not to simply memorize the answers. When you are unsure of your “guess” or make an error, be sure to go back to the textbook and carefully review. This will greatly improve your scores on classroom exams and quizzes.

ACTIVE LEARNING EXERCISE I

Attachment and Marital Happiness Research A major problem with longitudinal research is that people often drop out, and in this study the couples who were most likely to drop out were those who got divorced. After divorcing, they would not be available for your research after ten years of marriage, and they also were more likely to have been unhappy and less attached at the first measurement five years before. To account for this, you could omit those couples who were divorced after 10 years from the analysis of those who were married for 5 years. This would help control for the drop out and divorce factor.

FILL-IN EXERCISES

1. developmental psychology; 2. nature or nurture, continuity or stages, stability or change; 3. cross-sectional, longitudinal; 4. teratogens; 5. secondary; 6. cooing, babbling; 7. securely attached; 8. assimilation, accommodation; 9. preoperational; 10. encoding, retrieval.

MATCHING EXERCISES

- a. 3, b. 10, c. 8, d. 5, e. 9, f. 1, g. 4, h. 6, i. 7, j. 2.

<u>PRACTICE TEST I</u>		<u>PRACTICE TEST II</u>	
1. d (p. 292)	11. c (p. 305)	1. a (p. 292)	11. b (p. 309)
2. c (p. 292)	12. c (p. 306)	2. c (p. 293)	12. a (p. 309)
3. a (pp. 295-96)	13. c (p. 309)	3. b (p. 293)	13. d (p. 311)
4. c (p. 293)	14. a (p. 309)	4. c (p. 295)	14. c (p. 313)
5. d (p. 297)	15. d (p. 311)	5. d (p. 299)	15. d (p. 315)
6. b (p. 297)	16. d (p. 317)	6. d (p. 300)	16. a (p. 316)
7. b (p. 300)	17. b (p. 317)	7. a (p. 304)	17. c (p. 316)
8. a (pp. 301-02)	18. d (p. 319)	8. d (p. 305)	18. a (p. 316)
9. c (p. 304)	19. c (p. 321)	9. b (p. 308)	19. c (p. 325)
10.d (p. 304)	20. b (p. 311)	10.c (pp. 308-09)	20. c (p. 325)

Chapter

9

Life Span
Development II

OUTLINE (Survey & Question)

This outline is intended to help you *survey* the chapter. As you read through the various sections, write down any *questions* or comments that come to mind in the space provided. This is a valuable part of active learning and the SQ4R method. It not only makes your reading time more enjoyable and active, but it also increases retention and understanding of the material.

TOPIC

NOTES

I. MORAL DEVELOPMENT

- A. Kohlberg's Research

- B. Gender and Cultural Diversity: Insights Into Morality

II. PERSONALITY DEVELOPMENT OVER THE LIFE SPAN

- A. Thomas and Chess' Temperament Theory: A Biological Look at Personality Development

- B. Erikson's Psychosocial Theory: The Eight Stages of Life

- C. Research Highlight: Adolescent Rebellion, Midlife Crisis, and the Empty Nest—Myth or Reality?

III. MAJOR INFLUENCES ON PERSONALITY DEVELOPMENT

- A. Families: Their Effect on Personality
- B. Research Highlight: Children Who Survive Despite the Odds
- C. Occupational Choices: The Effect of Work and Careers
- D. Gender and Cultural Diversity: Cultural Differences in Ageism

IV. DEATH AND DYING

- A. Attitudes Toward Death and Dying: Cultural and Age Variations
- B. Grief: Lessons in Survival
- C. The Death Experience: Our Final Developmental Crisis
- D. Active Learning: Dealing With Your Own Death Anxiety



LEARNING OBJECTIVES (Read, Recite & wRite)

While *reading* the chapter, stop periodically and *recite* (or repeat in your own words) the answers to the following learning objectives. It will also help your retention if you *write* your answer in the space provided. (Page numbers refer to the text Psychology in Action, 5th Ed.)

1. List and describe Kohlberg's three levels of moral development, and provide an example of typical reasoning at each stage (pp. 332-335).
2. Describe the relationship between moral reasoning and moral behavior, and discuss the major criticisms of Kohlberg's theory related to political, cultural, and gender biases (pp. 335-336).
3. Describe Thomas and Chess's temperament theory of personality development, including each of their three temperamental styles and the influence of the goodness-of-fit between styles and the environment (p. 337).
4. Describe Erikson's eight stages of psychosocial development, and discuss both the criticisms and contributions of his theory (pp. 337-342).
5. Discuss the three myths of development: adolescent storm and stress, mid-life crisis, and empty nest syndrome (p. 340).
6. Describe Baumrind's three parenting styles and the subsequent criticisms of her research; discuss the impact of parental rejection and fathering on child development (pp. 342-344).
7. Discuss the causes of and treatment for family violence, the consequences of and future prevention of teen pregnancy, and the impact of divorce on social and emotional development. List nine predictors for a successful marriage (pp. 344-346).

8. Discuss research regarding factors that can increase resilience in children who are developing in “high-risk” environments (p. 347).

9. Describe how occupational choices affect development, and discuss the activity and disengagement theories of aging (pp. 346-349).

10. Define ageism, and discuss its effects. Describe cultural, gender, and ethnic differences in the status and treatment of the elderly (p. 349).

11. Describe cultural and age variations in attitudes toward death and dying (pp. 350-351).

12. Define grief, and describe the four stages of grieving. List three strategies for coping with grief (pp. 351-353).

13. Describe Kubler-Ross’s five-stage theory of death and dying, and discuss both the criticisms and contributions of her theory (p. 353).



KEY TERMS (Review)

The *review* step in the SQ4R method is very important to your performance on quizzes and exams. Upon completion of this chapter, you should be able to define the following terms.

Activity Theory: _____

Study and Review Guide

Adolescent Storm and Stress: _____

Ageism: _____

Autonomy versus Shame and Doubt: _____

Care Perspective: _____

Conventional Level: _____

Disengagement Theory: _____

Ego Integrity versus Despair: _____

Empty Nest Syndrome: _____

Generativity versus Stagnation: _____

Grief: _____

Study and Review Guide

Identity Crisis: _____

Identity versus Role Confusion: _____

Industry versus Inferiority: _____

Initiative versus Guilt: _____

Intimacy versus Isolation: _____

Justice Perspective: _____

Mid-life Crisis: _____

Postconventional Level: _____

Preconventional Level: _____

Psychosocial Stages of Development: _____

Resilience: _____

Temperament: _____

Thanatology: _____

Trust versus Mistrust: _____



ACTIVE LEARNING EXERCISES (Recite)

The *recite* step in the SQ4R method requires you to be an ACTIVE learner. By completing the following exercises, you will test and improve your mastery of the chapter material, which will also improve your performance on quizzes and exams. Answers to some exercises appear at the end of this study guide chapter.

ACTIVE LEARNING EXERCISE I

One of the best ways for young and middle-aged people to reduce ageism is through increased exposure to the elderly. Try visiting a local senior center, retirement home, and convalescent hospital. Each of these facilities houses people with varying ages, abilities, and levels of activity. When you talk with the people in these facilities, try to really get to know them. Ask important questions about their political, spiritual, or personal beliefs about child rearing, divorce, or the value of a college education. Ask how they think things have changed since they were in their 20s, 30s, and so on. Once you've established a level of comfort, try asking about controversial topics like gun control, abortion, premarital sex, and so on. (You might also try asking similar questions with elderly relatives. Younger people sometimes complain about "having to visit" their relatives, but interest might increase if they asked interesting questions.)

Our stereotypes about aging and the elderly are generally based on lack of information. As you get to know a larger group of older people, you'll realize your previous stereotypes no longer fit. Just as African Americans or Latinos can not be categorized under a few stereotypical traits or characteristics, the same is true for the elderly.

ACTIVE LEARNING EXERCISE II

Thinking Independently: Making Peace with Your Parents

(An Affective Skill)

One mark of a critical thinker is the ability to think independently, which requires insight into one's own beliefs. When we feel at peace with people, we can consider their beliefs in an untroubled way and espouse them as our own or reject them freely. The following exercise will help clarify how psychologically independent you are from your parents. Many people consider independence to be merely financial. However, psychological independence is an equally significant mark of adult development. Hopefully, exploring your relationship with your parents will help you become independent of them, as a critical thinker and as a person. In that regard, take a few moments to jot down your answers to the following:

1. Are you truly free of regrets and resentments from your childhood?
2. Are you relaxed and do you enjoy spending time with your parents? Or do you resent "having" to visit or interact with them?
3. Are you able to accept your parents, forgive them their mistakes, and give up trying to change them?
4. Do you feel loved and accepted by your parents?
5. Do you still compare yourself and compete with one of your brothers or sisters?
6. Are you still waiting to escape from your parents' rules, influence, or habits to become your own person?
7. Are you glad you had the parents you did?
8. If your parents are divorced, have you resolved your mixed feelings about this situation?

Study and Review Guide

9. Do you have fears of being trapped or disappointed by a committed love relationship or marriage in your own life?

10. Have you completed your resentments and regrets toward your parent who may no longer be living? Can you accept the reality and inevitability of your own death?

Your answers to each of these questions are an important first step in actually recognizing and eventually working through these long-standing problems. These questions were adapted from the paperback book Making Peace With Your Parents by Harold H. Bloomfield, M.D. and Leonard Felder, Ph.D. (New York: Ballantine Books, 1983). If you desire further information on this topic, this book is a wonderful resource. If problems with your parents are longstanding and too overwhelming, you may want help from professional psychologists or counselors. Your psychology instructor may be willing to recommend someone in your area.



CHAPTER OVERVIEW (Review)

The following CHAPTER OVERVIEW provides a narrative overview of the main topics covered in the chapter. Like the Visual Summary found at the end of each chapter in the text, this narrative summary provides a final opportunity to review chapter material.

I. Moral Development According to Kohlberg, morality progresses through three levels--each level consists of two stages. At the preconventional level, morality is self-centered. What is right is what one can get away with (Stage 1) or what is personally satisfying (Stage 2). Conventional level morality is based on a need for approval (Stage 3) and obedience to laws because they maintain the social order (Stage 4). Postconventional moral reasoning comes from adhering to the social contract (Stage 5), and the individual's own principles and universal values (Stage 6).

Kohlberg's theory has been criticized for being politically, culturally, and gender biased. Gilligan suggests women tend to take a care perspective in their moral reasoning, while men favor a justice perspective.

Research shows that in real life situations, not hypothetical situations, both sexes typically use both the justice and care orientations.

II. Personality Development over the Life Span Thomas and Chess emphasize the genetic component of certain traits (such as sociability) and the fact that babies often exhibit differences in temperament shortly after birth.

Erik Erikson expanded on Freud's ideas to develop eight psychosocial stages that cover the entire life span. The four stages that occur during childhood are trust versus mistrust, autonomy versus shame and doubt, initiative versus guilt, and industry versus inferiority.

Erikson believes the major psychosocial crisis of adolescence is the search for identity versus role confusion. During young adulthood, the individual's task is to establish intimacy over isolation, and during middle adulthood, the person must deal with generativity versus stagnation. At the end of life, the older adult must establish ego integrity, or face overwhelming despair at the realization of lost opportunities.

Research shows that adolescent storm and stress, the midlife crisis, and the empty nest syndrome may be exaggerated accounts of a few people's experiences and not that of most people.

III. Major Influences on Personality Development Parenting styles fall into four major categories: authoritarian, permissive-indifferent, permissive-indulgent, and authoritative. While parenting styles can variously affect a child's development, family violence, teenage pregnancies, and divorce usually have a negative influence.

Resilient children who survive an abusive and stress-filled childhood usually have good intellectual functioning, a relationship with a caring adult, and the ability to regulate their attention, emotions, and behavior.

The kind of work you do and the occupational choices you make can play a critical role in your life.

Before making a career decision, it is wise to research possible alternatives and take interest inventories.

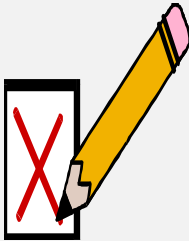
One theory of successful aging, activity theory, says people should remain active and involved throughout the entire life span. The other major theory, disengagement theory, says the elderly naturally and gracefully withdraw from life because they welcome the relief from roles they can no longer fulfill. Ageism is an important stressor for the elderly, but there are some cultures where aging is revered.

IV. Death and Dying *Attitudes about death and dying vary greatly across cultures and among age groups. While adults understand the permanence, universality, and nonfunctionality of death, children often do not master these concepts until around age seven.*

Grief is a natural and painful reaction to a loss. For most people, grief consists of four major stages—numbness, yearning, disorganization and despair, and resolution.

Elisabeth Kubler-Ross' five-stage theory of dying (denial, anger, bargaining, depression, and acceptance) offers important insights into the last major crisis that we face in life.

SELF-TESTS (Review & wRite)



Completing the following SELF-TESTS will provide immediate feedback on how well you have mastered the material. In the *fill-in exercises*, write the appropriate word or words in the blank spaces. The *matching exercise* requires you to match the terms in one column to their correct definitions in the other. For the *multiple-choice questions* in Practice Tests I and II, circle or underline the correct answer. When you are unsure of any answer, be sure to highlight or specially mark the item and then go back to the text for further review. Correct answers are provided at the end of this study guide chapter.

FILL-IN EXERCISES

1. According to Kohlberg, individuals at the _____ level make moral judgments based on fear of punishment or desire for pleasure (p. 333),
2. The _____ level of moral development occurs when moral judgments are based on compliance with the rules and values of society (p. 333).
3. According to Gilligan, the _____ perspective emphasizes individual rights and views people as differentiated and standing alone, while the _____ perspective focuses on interpersonal responsibility and interconnectedness with others (p. 336).
4. Erikson's _____ suggest individuals pass through eight developmental stages and that adult personality reflects how the distinct challenges or crises at each stage are resolved (p. 338).
5. According to Erikson, the dominant crisis of _____ is the establishment of an identity (p. 339).
6. The myth of _____ suggests emotional turmoil and rebellion are characteristic of all adolescents (p. 340).
7. Parents who are caring and sensitive toward their children, while also setting and enforcing firm limits and encouraging increasing responsibility are using the _____ style of parenting (p. 343).
8. Some children survive and prosper even under the harshest environmental circumstances. They are known as _____ children (p. 347).

Study and Review Guide

9. The _____ theory of aging suggests remaining active and involved as long as possible; whereas the _____ theory says older people should naturally and gracefully withdraw from life (p. 348).
10. The four stages of grief are called _____, _____, _____ and _____ (p. 352).

MATCHING EXERCISES

Column A

- a. Thanatology
- b. Ageism
- c. Activity Theory
- d. Grief
- e. Temperament
- f. Postconventional Level
- g. Young Adulthood
- h. Conventional Level
- i. Midlife Crisis
- j. Gilligan

Column B

- 1. ____ Basic inborn disposition.
- 2. ____ Time of Erikson's crisis of intimacy versus isolation.
- 3. ____ The study of death and dying.
- 4. ____ Good-child and law-and-order moral orientations.
- 5. ____ Prejudice against people based on their age.
- 6. ____ Care and justice perspective on morality.
- 7. ____ Myth of development.
- 8. ____ Social contract and universal ethics moral orientations.
- 9. ____ Suggests older people should remain active.
- 10. ____ A natural and painful reaction to a loss.

PRACTICE TEST I

1. During Kohlberg's _____ level of moral development, right and wrong are judged on the basis of consequences.
- a. conventional
 - b. amoral
 - c. postconventional
 - d. preconventional
2. When people have developed their own standards for right and wrong, they are judged by Kohlberg to be at the _____ level of morality.
- a. adolescent
 - b. postconventional
 - c. nonconventional
 - d. conventional
3. Kohlberg's theory of moral development has been criticized for its _____.
- a. cultural bias toward Western ideas of morality
 - b. political bias in favor of conservatives
 - c. sexual bias in favor of women
 - d. ethnic bias against Anglo-Saxons

Study and Review Guide

4. Gilligan's _____ perspective suggests that moral reasoning is based on the values of individual rights and independence.
 - a. justice
 - b. care
 - c. differentiated
 - d. independent

5. _____ is the basic, inborn dispositional quality that appears shortly after birth and characterizes an individual's style of approaching people and situations.
 - a. Personality
 - b. Trait theory
 - c. Character
 - d. Temperament

6. The positive or negative resolution of eight developmental challenges is characteristic of _____ theory.
 - a. Freud's psychosexual
 - b. Freud's psychoanalytic
 - c. Maslow's hierarchical
 - d. Erikson's psychosocial

7. According to Erikson, the challenge faced by infants in their first year is _____.
 - a. weaning
 - b. object permanence
 - c. trust versus mistrust
 - d. toilet training

8. According to Erikson, the need to develop a sense of identity is the principal task of _____.
 - a. the phallic stage of psychosexual development
 - b. adolescence
 - c. middle adulthood
 - d. the generativity versus stagnation stage of development

9. According to Erikson, the inner conflict during which an individual examines his or her life and values and makes decisions about life roles is called a(n) _____ crisis.
 - a. midlife
 - b. climacteric
 - c. integrity
 - d. identity

Study and Review Guide

10. In Erikson's final stage of psychosocial development, adults may _____.
 - a. regret lost opportunities
 - b. become despondent
 - c. review their accomplishments
 - d. any of these options

11. The belief that most parents experience depression and pain when the last child leaves home is supported by _____.
 - a. natural observation across cultures
 - b. a few individual cases
 - c. controlled experiments
 - d. random, large-scale surveys

12. Research on the midlife crisis suggests that it is _____.
 - a. typical of most middle-aged males
 - b. typical of most middle-aged females
 - c. rare in males and females
 - d. more likely to occur after middle age

13. "It's my way or the highway" is most likely to be said by a(n) _____ parent to his or her child.
 - a. authoritarian
 - b. authoritative
 - c. military
 - d. abusive

14. Permissive- _____ parents often raise children who are indifferent to the needs of others because the parents failed to provide appropriate controls or limits on the children's behavior.
 - a. indifferent
 - b. indulgent
 - c. neglectful
 - d. ambivalent

15. Marital conflict, substance abuse, mental disorders, and economic stress are all related to _____.
 - a. adolescent storm and strife
 - b. family violence
 - c. midlife crisis
 - d. all of these options

Study and Review Guide

16. This is **NOT** a problem related to adolescent pregnancy.
- reduced educational achievement
 - fewer children over the life span
 - more risks to maternal health
 - more risks to the child's health
17. There has been a _____ in the divorce rate since the 1970s in the United States.
- dramatic rise
 - modest rise
 - dramatic decline
 - modest decline
18. _____ children recover from trauma, display competence under stress, and prosper despite a high-risk status.
- Resilient
 - Self-actualized
 - Autonomous
 - Attached
19. In the United States, _____ is one of the greater stresses experienced by the elderly.
- physical decline
 - psychological decline
 - fear of death
 - ageism
20. According to Elizabeth Kubler-Ross, which of the following is **NOT** one of the stages that people go through while coping with death?
- retrenchment
 - denial
 - anger
 - bargaining

PRACTICE TEST II

1. Kohlberg used the _____ method to study moral development in people of different ages.
- longitudinal
 - experimental
 - cross-sectional
 - archival survey

Study and Review Guide

2. Moral judgment is self-centered and based on obtaining rewards and avoiding punishment in this stage of moral development.
 - a. preoperational
 - b. preconventional
 - c. conventional
 - d. postoperational

3. Once an individual accepts, internalizes, and applies the rules of society in making moral decisions, he or she is in the _____ stage.
 - a. formal conventional
 - b. conventional
 - c. informal operational
 - d. social operational

4. Personal standards of right and wrong are found in Kohlberg's _____ level of moral development.
 - a. lowest
 - b. highest
 - c. middle
 - d. all of these options

5. Thomas and Chess suggested that most children were born with one of these three temperament styles.
 - a. easy, difficult, slow-to-warm
 - b. attached, unattached, avoidant
 - c. imprinted, attached, anxious
 - d. introverted, extroverted, averted

6. A temperamental style that works best in periods of famine is the _____.
 - a. attached
 - b. extroverted
 - c. difficult
 - d. imprinted

7. Trust, initiative, identity, and generativity are the odd-numbered stages in Erikson's psychosocial theory of development. The even-numbered stages include _____.
 - a. autonomy, industry, intimacy, and ego integrity
 - b. egocentrism, effort, caring, and retirement
 - c. attachment, independence, genuineness, and self-actualization
 - d. anal, phallic, latent, and genital

Study and Review Guide

8. According to Erikson, intimacy is the result of the successful completion of this stage of development.
 - a. infancy and toddlerhood
 - b. junior and senior high school
 - c. young adulthood
 - d. middle adulthood

9. According to Baumrind, a(n) _____ parent will set firm limits, encourage responsibility, and demonstrate caring and sensitivity toward his or her children.
 - a. authoritarian
 - b. accepting
 - c. authoritative
 - d. attachment-style

10. Research has shown that _____ will always have an adverse impact on a child.
 - a. parental rejection
 - b. strong parental control
 - c. an angry parent
 - d. all of these options

11. Compared to mothers, fathers are _____.
 - a. just as involved in childcare after infancy
 - b. less responsive and nurturing when engaged in childcare
 - c. less likely to be seen as an attachment figure by their children
 - d. less involved with childcare during infancy

12. With regard to community resources for families, primary programs are designed to _____.
 - a. identify and prevent violence
 - b. rehabilitate violent family members
 - c. punish violent family members with jail or prison time
 - d. punish violent family members with mandatory community service

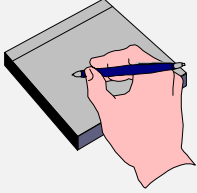
13. According to Everett and Everett, when children are involved, ex-spouses must let go of the marital relationship, develop new social ties, and _____.
 - a. gain joint-custody of the children
 - b. spend equal time and money on the children to avoid “favorites”
 - c. decide which parent will be the primary caretaker for the children
 - d. redefine parental roles

Study and Review Guide

14. Satisfaction during retirement is strongly related to good health, community and social activities, and _____.
- access to a willing sexual partner
 - socioeconomic status
 - being closer to 65 than 75 years of age
 - control over one's life
15. The _____ theory of aging suggests that it is natural and necessary for people to withdraw from their roles in life as they age in order to prepare themselves for death.
- Kubler-Ross
 - secondary process
 - developmental
 - disengagement
16. What do Japan, China, Native-American, and African-American cultures/ethnic groups have in common? They each _____.
- support the disengagement theory of aging
 - revere the elderly
 - exploit the elderly for their wisdom
 - have lower life-expectancies than other cultures and ethnic groups
17. Compared to other ethnic groups, Anglo-Americans have _____ life expectancy after the age of 75.
- the lowest
 - the same
 - somewhat longer
 - the longest
18. As a general concept, death is considered permanent, universal, and _____.
- spiritual
 - painful
 - nonfunctional
 - all of these options
19. Compared to people who show a lack of obvious grieving, people who exhibit intense initial grief work through the bereavement process _____.
- faster
 - no faster
 - much slower
 - moderately slower

Study and Review Guide

20. The acronym “DABDA” is used to remember Kubler-Ross’s stages of dying. First comes denial and anger, followed by _____ and depression, then ending with acceptance.
- a. bargaining
 - b. begging
 - c. believing
 - d. borrowing (hope)



ANSWERS

The following answers to active learning exercises, fill-ins, matching exercises, and practice tests 1 and 2 provide immediate feedback on your mastery of the material. Try not to simply memorize the answers. When you are unsure of your “guess” or make an error, be sure to go back to the textbook and carefully review. This will greatly improve your scores on classroom exams and quizzes.

FILL-IN EXERCISES

1. preconventional; 2. conventional; 3. justice, care; 4. psychosocial stages of development; 5. adolescence; 6. adolescent storm and stress; 7. authoritative; 8. resilient; 9. activity, disengagement; 10. numbness, yearning, disorganization and despair, and resolution.

MATCHING EXERCISES

a. 3, b. 5, c. 9, d. 10, e. 1, f. 8, g. 2, h. 4, i. 7, j. 6.

<u>PRACTICE TEST I</u>		<u>PRACTICE TEST II</u>	
1. d (p. 333)	11. b (p. 340)	1. c (pp. 332-33)	11. d (p. 344)
2. b (p. 335)	12. c (p. 340)	2. c (p. 333)	12. a (p. 344)
3. a (p. 335)	13. a (p. 342)	3. b (p. 333)	13. d (p. 346)
4. a (p. 336)	14. b (pp. 342-43)	4. b (p. 335)	14. d (p. 348)
5. d (p. 337)	15. b (p. 344)	5. a (p. 337)	15. d (p. 348)
6. d (p. 338)	16. b (p. 344)	6. c (p. 337)	16. b (p. 349)
7. c (p. 338)	17. d (p. 345)	7. a (p. 338)	17. a (p. 349)
8. b (p. 339)	18. a (p. 347)	8. c (pp. 338-39)	18. c (p. 351)
9. d (p. 339)	19. d (p. 349)	9. c (p. 343)	19. b (p. 352)
10. d (p. 339)	20. a (p. 353)	10. a (p. 343)	20. a (p. 353)

Chapter

10

Gender and
Human Sexuality

OUTLINE (Survey & Question)

This outline is intended to help you *survey* the chapter. As you read through the various sections, write down any *questions* or comments that come to mind in the space provided. This is a valuable part of active learning and the SQ4R method. It not only makes your reading time more enjoyable and active, but it also increases retention and understanding of the material.

TOPIC

NOTES

I. SEX AND GENDER

- A. Problems with Definition: What is “Maleness” or “Femaleness?”
- B. Gender Role Development: Two Major Theories
- C. Sex and Gender Differences: Nature versus Nurture
- D. Research Highlight: The Art and Science of Flirting

II. THE STUDY OF HUMAN SEXUALITY

- A. Gender and Cultural Diversity: A Cultural Look at Sexual Behaviors

III. SEXUAL BEHAVIOR

- A. Sexual Arousal and Response: Are Men Really from Mars And Women from Venus?

- B. Research Highlight: Are There Evolutionary Advantages to *Female* Nonmonogamy?

- C. Sexual Orientation: Contrasting Theories

IV. SEXUAL PROBLEMS

- A. Sexual Dysfunction: The Role of Biology and Learning

- B. Sexually Transmitted Diseases (STDs): The Special Problem of AIDS

- C. Active Learning: Rape Myths and Rape Prevention



LEARNING OBJECTIVES (Read, Recite & wRite)

While *reading* the chapter, stop periodically and *recite* (or repeat in your own words) the answers to the following learning objectives. It will also help your retention if you *write* your answer in the space provided. (Page numbers refer to the text Psychology in Action, 5th Ed.)

1. Differentiate between sex, gender, masculinity, and femininity (p. 360).
2. Differentiate between gender identity and sexual orientation; define transsexualism, transvestitism, homosexual, and bisexual (pp. 360-362).
3. Define gender role, and describe the two major theories of gender role development: social learning theory and cognitive development theory (pp. 362-363).
4. Describe the major sex and gender differences between males and females; discuss the contributions of nature and nurture on gender differences, and the effects of gender role stereotyping (pp. 364-366).
5. Define androgyny, and discuss research on the relationship between mental health characteristics and higher scores on masculinity or androgyny (pp. 366-367).
6. Briefly discuss the contributions of Havelock Ellis, Kinsey, and Masters and Johnson to the study of human sexuality (pp. 369-370).
7. Briefly describe cultural variations in human sexual behavior, and provide an example of an ethnocentric bias related to a U.S. sexual ritual or procedure (pp. 370-373).

Study and Review Guide

8. List and describe the four stages in Masters and Johnson's sexual response cycle (p. 374).
9. Discuss the two major perspectives that explain differences in sexual desire, motivation, and activity between men and women: the evolutionary perspective and the social role approach (pp. 375-376).
10. Describe the findings of naturalistic studies of human courtship rituals, including the role of the female in initiating and maintaining a flirtatious interaction (p. 367).
11. Discuss genetic/biological and psychosocial explanations for homosexuality; define homophobia and state the position of the psychological community regarding homosexuality (pp. 376-378).
12. List the major forms of sexual dysfunction and state their possible organic and/or psychological causes (pp. 378-381).
13. Discuss the impact of sexual scripts, hormones, nerve impulses, and emotions on sexual arousal, including the interaction of the sympathetic and parasympathetic nervous systems, and the role of performance anxiety (pp. 379-381).
14. Describe the four major principles of Masters and Johnson's approach to sex therapy. Describe three guidelines for improving sexual functioning (pp. 382-383).
15. List the major sexually transmitted diseases (STDs) and describe their basic symptoms and the consequences if left untreated. State age- and gender-related risk factors for contracting an STD (pp. 383-384).
16. Describe the five routes of transmission for an HIV infection, and explain the progression of the disease from initial infection to "full-blown AIDS" (pp. 384-385).

17. List six suggestions for decreasing the chances of contracting HIV/AIDS and other STDs (pp. 384-385).

18. Discuss common rape myths, and state three ways to avoid stranger rape plus three ways to prevent acquaintance rape (p. 386, Appendix B).



KEY TERMS (Review)

The *review* step in the SQ4R method is very important to your performance on quizzes and exams. Upon completion of this chapter, you should be able to define the following terms.

AIDS (Acquired Immune Deficiency Syndrome): _____

Androgyny: _____

Bisexual: _____

Double Standard: _____

Ejaculation: _____

Erectile Dysfunction: _____

Study and Review Guide

Excitement Phase: _____

Gender: _____

Gender Identity: _____

Gender Role: _____

HIV positive: _____

Homophobia: _____

Homosexual: _____

Orgasmic Dysfunction: _____

Orgasm Phase: _____

Performance Anxiety: _____

Study and Review Guide

Plateau Phase: _____

Refractory Period: _____

Resolution Phase: _____

Sex: _____

Sexual Dysfunction: _____

Sexual Orientation: _____

Sexual Response Cycle: _____

Sexual Scripts: _____

Transsexualism: _____

Transvestism: _____



ACTIVE LEARNING EXERCISES (Recite)

The *recite* step in the SQ4R method requires you to be an ACTIVE learner. By completing the following exercises, you will test and improve your mastery of the chapter material, which will also improve your performance on quizzes and exams. Answers to some exercises appear at the end of this study guide chapter.

ACTIVE LEARNING EXERCISE I

The Role of Culture and Gender on Personal Sexual Values

One of the most important ingredients of healthy sexuality is the ability to recognize and evaluate one's own values (ideals, mores, standards, and principles that guide behavior). Are the sexual values you hold a simple reflection of the values of your family or peer group? Or are they the result of careful, deliberate choice? Have you carefully examined opposing values and compared them to your own? How do your values reflect your culture and your gender role? Since values have such a powerful influence on thinking, you should critically evaluate them.

To help you explore your values regarding gender and human sexuality, read the four value statements on the left. Then, in the space to the right, simply check whether you agree or disagree.

- | | Agree | Disagree |
|--|-------|----------|
| 1. Anyone who wants to prevent pregnancy should have easy access to reliable methods of contraception; it doesn't matter whether a person is married or single, young or old. | _____ | _____ |
| 2. Gay and lesbian couples should be allowed the same legal protections (property inheritance, shared pension plans, shared medical benefits) as heterosexual married couples. | _____ | _____ |
| 3. Abortion in the first four months of pregnancy should be a private decision between the woman and her doctor. | _____ | _____ |
| 4. Sex education belongs in the home, not in public schools. | _____ | _____ |

Each person's sexual values come from a host of sources, some internal and others external to the individual. The second part of this exercise gives you an opportunity to examine these sources. Review your agree or disagree responses to the previous four statements. Indicate the degree to which each of the sources listed in the left-hand column has influenced your beliefs by placing a check mark in the appropriate column.

Study and Review Guide

VS = Very Significant Influence
 SS = Somewhat Significant Influence
 NS = Not a Significant Influence

Sources	Contraception			Homosexuality			Abortion			Sex Education		
	VS	SS	NS	VS	SS	NS	VS	SS	NS	VS	SS	NS
Personal experience												
Family patterns												
Peer standards												
Historical events												
Religious views												
Research findings												

Now reexamine the checks you made for each of your four sexual values and their source of influence. Do you notice any patterns in your check marks? Which source has been most influential in the development of your sexual values? Do you think this source is the most appropriate and most justifiable? Why or why not? Which source has been least influential in the development of your sexual values? How do you explain this? Do you notice any inconsistencies in your choice of sources? In what cases has personal experience played a more significant role than family patterns, peer standards, and so on? To further clarify your sexual perspective and sharpen your critical thinking skills, share your responses with a close friend, dating partner, or spouse.

ACTIVE LEARNING EXERCISE II

Personal Values Clarification: Exploring Your Own Gender Role Development (An Affective Skill)

To help you explore your values regarding "masculinity and femininity," we offer several critical thinking questions regarding your own gender role socialization. While reading through the

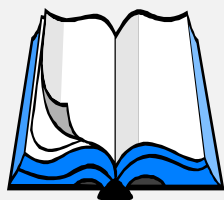
Study and Review Guide

questions, jot down your thoughts and try to think of specific examples from your personal history. You will find that sharing these written notes with others often leads to a fascinating discussion of "the proper roles for women and men."

1. During your early childhood, what gender messages did you receive from your favorite fairy tales, books, television shows? How were women and men portrayed? Are the roles of men and women different in the books and television programs you read and watch today?
2. Did anyone ever tell you that you were a "big boy now" or to "act like a lady?" What did they mean? How did you feel?
3. What were the power relationships like in your family? In what situations was your mother powerful? Your father? Do you remember being treated differently from your opposite-sexed brother or sister? What is the division of labor in your family today (breadwinner, housekeeper, etc.)?
4. As a child, what did you want to be when you grew up? Did that change, and if so, when? Why? What career are you now pursuing? Why?
5. What were your favorite subjects in school? Your most hated subjects? Why?
6. Have you ever wished you were born as the opposite sex? If so, why?
7. Have you ever felt competitive with friends of your same sex? If so, over what?
8. In what ways do you express your emotions (crying, slamming doors, etc.), and how is it related to your being a male or female?
9. What kinds of things do you get most rewarded for by others today (attractiveness, strength, intelligence, business success, money earned, family status, etc.)? How does this relate to your gender role?

Study and Review Guide

10. Have you ever deviated from traditional expectations of you as a male or female? If so, what was your own and others' reaction to it? Have you ever felt restricted or pressured by social expectations of you as a man or woman? If so, in what way?



CHAPTER OVERVIEW (Review)

The following CHAPTER OVERVIEW provides a narrative overview of the main topics covered in the chapter. Like the Visual Summary found at the end of each chapter in the text, this narrative summary provides a final opportunity to review chapter material.

I. Sex and Gender *The term sex is differentiated along seven dimensions: chromosomal sex, gonadal sex, hormonal sex, external genitals, internal accessory organs, secondary sex characteristics, and sexual orientation. Gender, on the other hand, is differentiated according to gender identity and gender role.*

Transsexualism is a problem with gender identity; transvestism is cross-dressing for sexual arousal. Sexual orientation (gay, lesbian, bisexual, or heterosexual) is unrelated to both transsexualism and transvestism.

There are two main theories of gender role development: Social learning theorists focus on rewards, punishments, and imitation, while cognitive-developmental theorists emphasize the active, thinking processes of the individual.

Studies of male and female sex differences find several obvious physical differences, such as height, body build, and reproductive organs. There are also important functional and structural sex differences in the brains of human females and males. Looking at gender differences, studies find some differences (such as in aggression and verbal skills), but the cause of these differences (either nature or nurture) is still being debated.

II. The Study of Human Sexuality *Although sex has always been an important part of human interest, motivation, and behavior, it received little scientific attention before the twentieth century. Havelock Ellis was among the first to study human sexuality despite the repression and secrecy of nineteenth-century Victorian times.*

Alfred Kinsey and his colleagues were the first to conduct large-scale, systematic surveys and interviews of the sexual practices and preferences of Americans during the 1940s and 1950s. The research team of Masters and Johnson pioneered the use of actual laboratory measurement and observation of human physiological response during sexual activity. Cultural studies are also important sources of scientific information on human sexuality.

III. Sexual Behavior *Masters and Johnson identified a four-stage sexual response cycle during sexual activity---excitement, plateau, orgasm, and resolution. There are numerous similarities and differences between the sexes in this cycle, but differences are the focus of most research. According to the evolutionary perspective, males engage in more sexual behaviors with more sexual partners because it helps the species survive. The social role approach suggests this difference reflects a double standard, which subtly encourages male sexuality while discouraging female sexuality.*

Some theorists believe sexual orientation is genetic/biological, while others believe it develops from psychosocial causes. The biological explanation is gaining research support, and it often leads to more

acceptance of homosexuality. Despite increased understanding, sexual orientation remains a divisive issue in America.

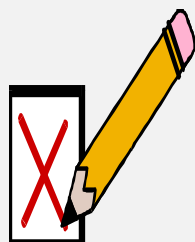
IV. Sexual Problems Many people experience sexual dysfunction. They often fail to recognize the role of learning in both sexual arousal and response. Early gender role training affects our sexual behaviors, and sexual scripts teach us what to consider the "best" sex. These scripts may create problems if they are based on unrealistic expectations.

Several aspects of sexual arousal and response are also biologically based. Ejaculation and orgasm are partially reflexive. And the parasympathetic nervous system must be dominant for sexual arousal, while the sympathetic nervous system must dominate for orgasm to occur.

Many sexual problems can be helped with sex therapy. Masters and Johnson emphasize the couple's relationship, combined physiological and psychosocial factors, cognitions, and specific behavioral techniques. Professional sex therapists offer important guidelines for everyone: Sex education should be early and positive, avoid a goal or performance orientation, and keep communication open.

The most publicized STD is AIDS. Although AIDS is known to be transmitted only through sexual contact or exposure to infected blood, many people have irrational fears of contagion. At the same time, an estimated one million people in the U.S. are HIV positive and therefore carriers.

SELF-TESTS (Review & write)



Completing the following SELF-TESTS will provide immediate feedback on how well you have mastered the material. In the *fill-in exercises*, write the appropriate word or words in the blank spaces. The *matching exercise* requires you to match the terms in one column to their correct definitions in the other. For the *multiple-choice questions* in Practice Tests I and II, circle or underline the correct answer. When you are unsure of any answer, be sure to highlight or specially mark the item and then go back to the text for further review. Correct answers are provided at the end of this study guide chapter.

FILL-IN EXERCISES

1. The psychological and sociocultural meanings added to biological maleness and femaleness is known as _____ (p. 360).
2. _____ refers to having a gender identity opposite that of the biological sex; whereas _____ refers to becoming sexually aroused by wearing the clothing of the other sex (p. 362).
3. _____ refers to a sexual orientation toward the same sex; whereas being sexually attracted to both males and females is referred to as _____ (p. 362).

Study and Review Guide

4. Societal expectations for normal and appropriate female and male behavior are known as _____ (pp. 362-363).
5. _____ individuals combine some characteristics considered typically male with characteristics considered typically female (p. 366).
6. During the 19th century, it was believed that _____ caused brain damage and death (p. 370).
7. During the resolution phase of the sexual response cycle, a male is likely to be in the _____ period (p. 374).
8. According to the _____, sexual differences (such as males having more sexual partners) evolved from an ancient set of mating patterns that helped the species survive (p. 375).
9. An irrational fear of homosexuality in others or oneself is known as _____ (p. 377).
10. Impairment of the normal physiological processes of arousal and orgasm is known as a _____ (p. 378).

MATCHING EXERCISES

Column A

- a. Double Standard
- b. Havelock Ellis
- c. Sex
- d. Bisexual
- e. Masters and Johnson
- f. Plateau Phase
- g. Gender Identity
- h. Orgasmic Dysfunction
- i. Performance Anxiety
- j. Androgyny

Column B

1. ____ Self perception as either male or female.
2. ____ Sexual orientation to both men and women.
3. ____ Combination of both masculine and feminine.
4. ____ Used direct measurement and observation of sex.
5. ____ Encourages male sexuality and discourages female's.
6. ____ Inability to respond to sexual arousal to point of orgasm.
7. ____ Leveling off of sexual arousal.
8. ____ Fearing won't meet self or partner's sexual expectations.
9. ____ Biological dimensions of maleness or femaleness.
10. ____ Based his research on personal diaries.

PRACTICE TEST I

1. A major pioneer in sex research who first used the case study method was _____.
 - a. B. F. Skinner
 - b. Sigmund Freud
 - c. Alfred Kinsey
 - d. Havelock Ellis

2. One of the earliest and most extensive surveys of human sexual behavior in the United States was conducted by _____.
 - a. Havelock Ellis
 - b. William Masters and Virginia Johnson
 - c. Emily and John Roper
 - d. Alfred Kinsey

3. _____ refers to a person's biological dimensions of maleness or femaleness.
 - a. The sex chromosome
 - b. The gonads
 - c. Sex
 - d. Gender

4. The exaggeration and rigid application of societal expectations for appropriate female and male behavior is known as gender role _____.
 - a. stereotypes
 - b. discrimination
 - c. prejudice
 - d. harassment

5. The _____ theory states that children learn their gender roles by actively processing information about their sex, gender schemas, and social reinforcements.
 - a. mental processing
 - b. cognitive development
 - c. information gathering
 - d. cognitive-social

6. A transsexual is a person who has a _____.
 - a. mismatch between gender identity and his or her gonads, genitals, or internal accessory organs
 - b. mismatch between gender role and his or her gonads, genitals, or internal accessory organs
 - c. homosexual preference for sexual gratification
 - d. need to wear clothing of the opposite sex for sexual gratification

Study and Review Guide

7. A _____ individual is sexually attracted to both genders.
 - a. bisexual
 - b. multisexual
 - c. transvestite
 - d. homo-heterosexual

8. Males with _____ levels of intellectual abilities achieve significantly higher math scores on the SAT.
 - a. lower
 - b. average
 - c. the highest
 - d. all of these options

9. Males display more _____ aggression than females.
 - a. physical
 - b. indirect
 - c. relational
 - d. all of these options

10. Androgyny is another word for a(n) _____.
 - a. combination of both male and female personality traits
 - b. adrenogenital syndrome
 - c. oversupply of androgens during prenatal development
 - d. transvestite

11. Limited exposure to the sexual practices of other cultures often leads to _____, which is the tendency to view our culture's sexual practices as normal.
 - a. sexual prejudice
 - b. ethnic typing
 - c. ethnocentrism
 - d. sexual predation

12. The inability to obtain or maintain an erection sufficiently firm for intercourse is _____.
 - a. really not possible
 - b. sometimes associated with diabetes, hormonal deficiencies, stress, and anxiety
 - c. experienced only by older males
 - d. associated with long-term relationships

13. Regarding sexuality, the double standard _____.
 - a. encourages male sexuality
 - b. discourages female sexuality
 - c. makes women responsible for stopping male advances
 - d. all of these options

Study and Review Guide

14. Orgasm refers to the _____.
 - a. final phase of the sexual response cycle
 - b. male refractory period
 - c. experiencing a highly intense and pleasurable sense of release of tension
 - d. peak of the excitement phase

15. Research on the causes of homosexuality _____.
 - a. has discounted psychosocial theories
 - b. provides evidence of a biological foundation
 - c. is inconclusive
 - d. all of these options

16. Homophobia is a(n) _____ related to homosexuality in one's self or others.
 - a. intense anxiety response
 - b. irrational fear
 - c. discriminative attitude
 - d. set of rational beliefs

17. The refractory period is experienced by _____ in the last phase of the sexual response model.
 - a. men
 - b. women
 - c. all men and women
 - d. most men and some women

18. Painful intercourse in men or women is called _____.
 - a. dyspareunia
 - b. endorphin-deficient syndrome
 - c. sexual aversion disorder
 - d. priapism

19. All of the following are principles of Masters and Johnson's approach to sex therapy except _____.
 - a. setting goals to improve sexual performance
 - b. examination of the relationship between the two people
 - c. use of medical histories and physical examinations
 - d. exploration of individual attitudes and sex education

20. AIDS is the result of an infection by the _____ virus (HIV).
 - a. human incapacitating
 - b. herpes I
 - c. human immunodeficiency
 - d. hepatitis I

PRACTICE TEST II

1. Sex is to biological as _____.
 - a. gender is to psychosocial
 - b. anatomy is to physiology
 - c. intercourse is to making love
 - d. physiological is to psychological

2. Which of the following is **NOT** a gonad?
 - a. ovary
 - b. testicle
 - c. uterus
 - d. all of these are gonads

3. Gender _____ is a term most associated with cognitive developmental theory.
 - a. roles
 - b. identity
 - c. confusion
 - d. schemas

4. Men are more likely to attribute their successes to internal abilities; women are more likely to attribute their successes to _____.
 - a. internal abilities
 - b. external factors
 - c. the men in their lives
 - d. their mothers

5. Lower levels of serotonin in males have been linked to their _____.
 - a. sexual arousal
 - b. aggressive behavior
 - c. alertness
 - d. all of these options

6. Androgyny is _____.
 - a. a combination of masculine and feminine traits
 - b. another term for a hermaphrodite
 - c. an intersexed individual
 - d. an intrasexed individual

Study and Review Guide

7. The physiological aspects of human sexual responses were studied by _____.
 - a. Havelock Ellis
 - b. Freud
 - c. Masters and Johnson
 - d. Alfred Kinsey

8. In recent years, _____ have condemned female circumcision, clitoridectomy, and genital infibulation.
 - a. most Middle Eastern countries
 - b. the United Nations
 - c. all African nations
 - d. all of these options

9. In your text's diving analogy for the sexual response model, walking across the diving board is analogous to the _____ phase.
 - a. excitement
 - b. plateau
 - c. orgasm
 - d. resolution

10. Research suggests that, compared to men, women in the United States _____.
 - a. engage in sex less often
 - b. engage in fewer sexual behaviors
 - c. have fewer sexual partners
 - d. all of these options

11. In scientific terms, flirting is known as _____.
 - a. a display rule
 - b. social engagement
 - c. nonverbal courtship signaling
 - d. preliminary sexual-perceptual communication

12. According to research on flirting, interest between heterosexuals is generally initiated by which sex?
 - a. women
 - b. men
 - c. it is too variable to say
 - d. men, when they are with other men; otherwise it is women

Study and Review Guide

13. Use of psychoanalytic therapy or aversion conditioning to treat homosexuality is advocated by _____.
 - a. the American Psychiatric Association
 - b. the American Psychological Association
 - c. both of these organizations
 - d. neither of these organizations

14. When a male cannot control how quickly he ejaculates in 50% or more of his sexual encounters, he is most likely experiencing a problem called _____.
 - a. spermarche
 - b. dyspareunia
 - c. male orgasmic dysfunction
 - d. premature ejaculation

15. Vaginismus, sexual aversion, and premature ejaculation are primarily due to _____.
 - a. hormonal factors
 - b. anatomical factors
 - c. physiological disease conditions
 - d. psychological factors

16. With regard to sexual functioning, tobacco use is associated with _____.
 - a. increased sexual desire
 - b. lowered inhibitions
 - c. inhibited orgasm
 - d. a decrease in the frequency and duration of erections

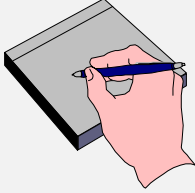
17. Sexual arousal is dependent on the dominance of the _____ nervous system.
 - a. parasympathetic
 - b. autonomic
 - c. somatic
 - d. sympathetic

18. Based on your answer to the previous question, _____ can therefore interfere with sexual arousal.
 - a. relaxation
 - b. strong emotions
 - c. love
 - d. foreplay

19. Erectile disorders are most likely due to _____.
 - a. an organic cause
 - b. psychological factors
 - c. a sleep disorder
 - d. lack of foreplay

Study and Review Guide

20. With regard to STDs, the use of latex condoms and dental dams, and the practice of monogamy are considered to be _____.
- a. a waste of time
 - b. safe sexual practices
 - c. the only ways to prevent STD transmission
 - d. methods of lessening your chance of contracting an STD



ANSWERS

The following answers to active learning exercises, fill-ins, matching exercises, and practice tests 1 and 2 provide immediate feedback on your mastery of the material. Try not to simply memorize the answers. When you are unsure of your “guess” or make an error, be sure to go back to the textbook and carefully review. This will greatly improve your scores on classroom exams and quizzes.

FILL-IN EXERCISES

1. gender; 2. Transsexualism, transvestism; 3. Homosexuality (or gay or lesbian), bisexuality; 4. gender roles; 5. Androgynous; 6. nocturnal emissions; 7. refractory; 8. evolutionary perspective; 9. homophobia; 10. sexual dysfunction.

MATCHING EXERCISES

a. 5, b. 10, c. 9, d. 2, e. 4, f. 7, g. 1, h. 6, i. 8, j. 3.

<u>PRACTICE TEST I</u>		<u>PRACTICE TEST II</u>	
1. d (p. 370)	11. c (p. 371)	1. a (p. 360)	11. c (p. 367)
2. d (p. 370)	12. b (p. 378)	2. c (p. 361)	12. a (p. 367)
3. c (p. 360)	13. d (p. 375)	3. d (p. 363)	13. d (p. 378)
4. a (p. 363)	14. c (p. 374)	4. b (p. 365)	14. d (p. 379)
5. b (p. 363)	15. d (p. 376)	5. b (p. 366)	15. d (p. 379)
6. a (p. 362)	16. b (p. 377)	6. a (p. 366)	16. d (p. 382)
7. a (p. 362)	17. a (p. 374)	7. c (p. 370)	17. a (p. 381)
8. c (p. 364)	18. a (p. 379)	8. b (pp. 3372-73)	18. b (p. 381)
9. a (p. 364)	19. a (p. 382)	9. b (p. 374)	19. a (p. 381)
10.a (p. 366)	20. c (p. 383)	10.d (pp. 375-76)	20. d (p. 385)

Chapter

11

Motivation and Emotion

OUTLINE (Survey & Question)

This outline is intended to help you *survey* the chapter. As you read through the various sections, write down any *questions* or comments that come to mind in the space provided. This is a valuable part of active learning and the SQ4R method. It not only makes your reading time more enjoyable and active, but it also increases retention and understanding of the material.

TOPIC

NOTES

I. UNDERSTANDING MOTIVATION

- A. Hunger and Eating: Internal and External Factors
- B. Arousal: The Need for Stimulation
- C. Achievement: The Need for Success
- D. Active Learning: Measuring Your Own Need for Achievement

II. GENERAL THEORIES OF MOTIVATION

- A. Biological Theories: Looking for Internal "Whys" of Behavior

- B. Psychosocial Theories: Incentives and Cognitions

- C. Interactionism: Maslow's Hierarchy of Needs

III. UNDERSTANDING EMOTION

- A. Cognitive Component: Subjective Feelings and Evaluations

- B. Physiological Component: The Role of the Brain and Autonomic Nervous System

- C. Behavioral Component: Expressing Emotions

- D. Emotional Intelligence (EQ): Combining the Three Components of Emotion

IV. GENERAL THEORIES OF EMOTION

- A. James-Lange Theory: The Reaction Is the Emotion

- B. Cannon-Bard Theory: Emotions and Reactions Are Simultaneous

- C. Facial Feedback Hypothesis: The Face Determines Emotions

Study and Review Guide

D. Schachter's Two-Factor Theory: The Label Is the Emotion

E. Research Highlight: Are Abused Children More Alert to Negative Emotions?

F. General and Cultural Diversity: Evolutionary, Cultural, and Gender Influences on Emotions



LEARNING OBJECTIVES (Read, Recite & wRite)

While *reading* the chapter, stop periodically and *recite* (or repeat in your own words) the answers to the following learning objectives. It will also help your retention if you *write* your answer in the space provided. (Page numbers refer to the text Psychology in Action, 5th Ed.)

1. Define motivation and emotion, and discuss how they overlap (p. 392).
2. Describe how internal factors, external factors, and the interaction between these factors trigger hunger or eating behavior (pp. 392-395).
3. State the consequences of obesity, and describe the safest, most reliable method of weight loss. Differentiate between anorexia nervosa and bulimia; state the causes and risk factors for the development of these eating disorders (pp. 396-397).
4. Describe the arousal motive and the effects of under- or over-arousal. Discuss the four factors that characterize sensation seeking, and state the consequences to relationships in which this motive is mismatched (pp. 397-399).

Study Guide

5. Describe the achievement motive, possible causal factors, and the traits that characterize people with a high need for achievement. Define intrinsic and extrinsic motivation, and describe their relationship to achievement (pp. 399-403).
6. Discuss the biological theories of motivation: instinct and drive-reduction (pp. 404-405).
7. Discuss the psychosocial theories of motivation: incentive, cognitive, and Maslow's hierarchy of needs. Describe the cross-cultural research that seems to refute the sequential pursuit of Maslow's needs (pp. 405-407).
8. Describe the cognitive, physiological, and behavioral components of emotion (pp. 408-409).
9. Explain the role of the limbic system in primitive emotions and the role of the frontal lobes in monitoring and controlling emotions (pp. 409-410).
10. Describe the role of the autonomic nervous system and the neurotransmitters, epinephrine and norepinephrine, in emotional arousal (p. 410).
11. Describe the use of the polygraph in measuring sympathetic arousal; discuss the effectiveness of the polygraph in lie detection (pp. 410-412).
12. Discuss how facial expressions and body movement are used to communicate emotions; describe cross-cultural research findings regarding emotional expressions (pp. 412-413).
13. Describe how emotional intelligence combines the cognitive, physiological, and behavioral components of emotion, and discuss the controversy regarding this concept (p. 414).

Study and Review Guide

14. Compare and contrast the James-Lange, Cannon-Bard, facial-feedback, and Schachter's two-factor theories of emotion; discuss the research regarding each of these theories (pp. 415-419).
15. Describe research findings on the abused child's heightened reactivity to anger, the evolutionary theory of emotional development, culturally universal emotions, culturally different display rules, and gender differences in emotional expression (pp. 419-422).



KEY TERMS (Review)

The *review* step in the SQ4R method is very important to your performance on quizzes and exams. Upon completion of this chapter, you should be able to define the following terms.

Achievement Motivation (nAch): _____

Anorexia Nervosa: _____

Arousal Motive: _____

Bulimia Nervosa: _____

Cannon-Bard Theory: _____

Study Guide

Display Rules: _____

Drive-Reduction Theory: _____

Emotion: _____

Emotional Intelligence: _____

Extrinsic Motivation: _____

Facial-Feedback Hypothesis: _____

Hierarchy of Needs: _____

Incentive Theory: _____

Instincts: _____

Intrinsic Motivation: _____

Study and Review Guide

James-Lange Theory: _____

Lateral Hypothalamus (LH): _____

Motivation: _____

Polygraph: _____

Schachter's Two-Factor Theory: _____

Set Point: _____

Ventromedial Hypothalamus (VMH): _____



ACTIVE LEARNING EXERCISES (Recite)

The *recite* step in the SQ4R method requires you to be an ACTIVE learner. By completing the following exercises, you will test and improve your mastery of the chapter material, which will also improve your performance on quizzes and exams. Answers to some exercises appear at the end of this study guide chapter.

ACTIVE LEARNING EXERCISE I

Charting Your Moods and Emotions (An Affective Skill)

Self-understanding requires the ability to recognize and analyze your own emotions and to recognize the external factors that affect your emotions. From this place of self-understanding you will,

Study Guide

hopefully, be able to be more in control of your own moods and needs, gain insight into the moods and needs of others, and improve your relationships.

One of the best ways to understand the three basic components of emotions and to understand your own daily or monthly "mood swings" is to chart your emotions for at least one week. Each morning when you first wake up or each night before retiring, complete your daily mood evaluation chart. Describe your primary mood at the time of your writing, how your body physiologically registers that emotion or mood, the thoughts, expectations, or beliefs surrounding that mood, and give a number or word to rank or evaluate the pleasure or intensity of that emotion. Charting your moods or emotions helps you to recognize your own fluctuations and helps you to explain yourself to others.

	Primary Mood	Physiological Description	Cognitive (Thoughts)	Behavioral Description	Subjective Evaluation
Day					
(1)					
(2)					
(3)					
(4)					
(5)					
(6)					
(7)					

ACTIVE LEARNING EXERCISE II

Having practiced identifying your mood or emotional states in the previous active learning exercise, now we can explore a related topic, that of *subjective well being*. Researchers in this area often ask participants to evaluate either their overall life satisfaction or their feelings of happiness (sometimes defined as a high ratio of positive to negative feelings). Stop for a moment and write down your own

Study and Review Guide

life satisfaction and happiness scores (on a scale from one to 100 with one as the lowest) in the space provided. Life Satisfaction score _____ Happiness score _____

Now circle true or false to the following items:

1. Among all age groups, America's senior citizens are the least happy and most dissatisfied with their life. True or False?
2. People who have complete quadriplegia (with both arms and both legs paralyzed) feel their lives are below average in happiness. True or False?
3. Having children is life's greatest joy; thus, parents report more overall happiness than those who do not have children. True or False?
4. Most people would be happier if they had more money. True or False?
5. People with a college education are happier and report more life satisfaction than people with only a high school diploma. True or False?

The answers to this exercise can be found at the end of this study guide chapter—and they may surprise you!



CHAPTER OVERVIEW (Review)

The following CHAPTER OVERVIEW provides a narrative overview of the main topics covered in the chapter. Like the Visual Summary found at the end of each chapter in the text, this narrative summary provides a final opportunity to *review* chapter material.

I. Understanding Motivation *Motivation is the study of the "whys" of behavior, whereas emotion is the study of feelings. Because motivated behaviors are often closely related to emotions, these two topics are frequently studied together. A variety of motives are discussed throughout this text. In this chapter, we focus on hunger, arousal, and achievement.*

Both internal (stomach, blood chemistry, the brain) and external (cultural conditioning) factors affect hunger and eating.

A large number of people have eating disorders. Obesity seems to result from biological factors, such as the individual's genetic inheritance, and from psychological factors. Anorexia nervosa (extreme weight loss due to self-imposed starvation) and bulimia nervosa (excessive consumption of food followed by purging) are both related to an intense fear of obesity.

According to the arousal motive, people seek an optimal level of arousal that maximizes their performance. There are, however, individual differences in this need. According to Zuckerman, high sensation seekers are biologically "prewired" to need a higher level of stimulation, whereas the reverse is true for low sensation seekers.

Achievement involves the need for success, for doing better than others, and for mastering challenging tasks. Research with intrinsic versus extrinsic motivation shows that extrinsic rewards can lower interest and achievement motivation.

II. General Theories of Motivation *There are two approaches explaining motivation: biological theories (including instinct theory and drive-reduction theory) and psychosocial theories (including incentive, cognitive, and Maslow's hierarchy of needs).*

Instinct theories suggest there is some inborn, genetic component to motivation. Drive-reduction theory suggests that internal tensions (produced by the body's demand for homeostasis) "push" the organism toward satisfying basic needs.

According to incentive theory, motivation results from the "pull" of external environmental stimuli. Cognitive theories emphasize the importance of thoughts, attributions, and expectations.

Maslow's hierarchy of needs or motives incorporates both biological and psychological theories. He believed that basic physiological and survival needs must be satisfied before a person can attempt to satisfy higher needs. Critics question the importance of sequentially working up through these steps.

III. Understanding Emotion *All emotions have three basic components: cognitive (thoughts, beliefs, and expectations); physiological (increased heart rate, respiration rate, and so on); and behavioral (facial expressions and bodily gestures).*

Self-report techniques, such as paper-and-pencil tests, surveys, and interviews, are used to study the cognitive component of emotions.

Studies of the physiological component of emotion find that most emotions involve a general, nonspecific arousal of the nervous system. This arousal involves the cerebral cortex, the limbic system, and the frontal lobes of the brain. The most obvious signs of arousal (trembling, increased heart rate, sweating, and so on) result from activation of the sympathetic nervous system, a subdivision of the autonomic nervous system. The parasympathetic system restores the body to "status quo."

A polygraph measures changes in emotional arousal (increased heart rate, blood pressure, and so on). Although the polygraph is used in police work and for employment purposes, psychologists have found it a poor predictor of guilt or innocence or of truth or lies.

The behavioral component of emotions refers to how we express our emotions. Facial expressions and body movements are two major forms of nonverbal communication.

Emotional intelligence involves knowing and managing emotions, empathy, and maintaining satisfying relationships.

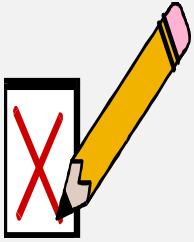
IV. General Theories of Emotion *There are four major theories to explain what causes emotion: The James-Lange theory suggests we interpret the way we feel on the basis of physical sensations such as increased heart rate, trembling, and so on. The Cannon-Bard theory suggests feelings are created from independent and simultaneous stimulation of both the cortex and the autonomic nervous system.*

According to the facial feedback hypothesis, facial movements elicit specific emotions. Schachter's two-factor theory suggests that emotions depend on two factors---physical arousal and a cognitive labeling of the arousal. In other words, people notice what is going on around them, as well as their own bodily responses, and then label the emotion accordingly.

Study and Review Guide

Most psychologists believe that emotions result from a complex interplay between evolution and culture. Studies have identified 7 to 10 basic emotions that are universal ---experienced and expressed in similar ways across almost all cultures. Display rules differ across cultures and between men and women.

SELF-TESTS (Review & write)



Completing the following SELF-TESTS will provide immediate feedback on how well you have mastered the material. In the *fill-in exercises*, write the appropriate word or words in the blank spaces. The *matching exercise* requires you to match the terms in one column to their correct definitions in the other. For the *multiple-choice questions* in Practice Tests I and II, circle or underline the correct answer. When you are unsure of any answer, be sure to highlight or specially mark the item and then go back to the text for further review. Correct answers are provided at the end of this study guide chapter.

FILL-IN EXERCISES

1. _____ refers to factors within an individual that activate, maintain, and direct behavior toward a goal; whereas _____ refers to feelings or affective responses that result from physiological arousal, thoughts and beliefs, subjective evaluation, and bodily expression (p. 392).
2. If the _____ of a rat is destroyed, the rat will overeat to the point of extreme obesity (p. 394).
3. Consuming enormous quantities of food (binges) followed by purging with laxatives or vomiting is referred to as _____ (p. 396).
4. The _____ motive causes us to look for a certain amount of stimulation and complexity from our environment (p. 397).
5. _____ refers to the need for success, for doing better than others, and for mastering challenging tasks (p. 399).
6. While _____ says internal factors *push* us in certain directions, _____ says external stimuli *pull* us (p. 405).
7. Maslow's _____ suggests basic survival and security needs must be satisfied before moving on to higher needs such as self-actualization (p. 406).
8. There are three basic components of emotions: the _____, _____, and _____ (pp. 408-409).
9. Research on the _____ suggests that smiling can actually make you happier (p. 417).

Study and Review Guide

10. Research finds that people across a variety of cultures express emotions in strikingly similar ways. This supports _____ theories of emotion (p. 420).

MATCHING EXERCISES

Column A

Column B

- | | |
|-------------------------------|--|
| a. Motivation | 1. _____ Measures changes in emotional arousal. |
| b. Drive-Reduction Theory | 2. _____ Can sometimes lower interest and achievement. |
| c. Anorexia Nervosa | 3. _____ Facial movements elicit specific emotions. |
| d. Polygraphs | 4. _____ Knowing and appropriately managing emotions. |
| e. James-Lange Theory | 5. _____ Study of the “whys” of behavior. |
| f. Emotional Intelligence | 6. _____ Cultural norms governing emotional expressions. |
| g. Facial Feedback Hypothesis | 7. _____ A smile of real joy. |
| h. Display Rules | 8. _____ Feelings interpreted from physical sensations. |
| i. Duchenne Smile | 9. _____ Internal tensions “push” organism toward basic needs. |
| j. Extrinsic Motivation | 10. _____ Extreme weight loss due to self-imposed starvation. |

PRACTICE TEST I

- _____ activates and directs behavior; _____ represents the feeling responses to thoughts, situations, or behaviors.
 - Motivation; emotion
 - Incentives; needs
 - Motives; drives
 - Motivation; compulsions
- Hunger is least likely to be motivated by _____.
 - glucose uptake
 - stomach contractions
 - the hypothalamus
 - cultural conditioning
- Belinda appears to be starving herself, and has obviously lost a lot of weight in just a few months. You suspect she might have _____.
 - a compulsive dieting disorder
 - an obesity phobia
 - anorexia nervosa
 - bulimia nervosa

Study Guide

4. According to the _____ theory, there is an ideal or optimal level of arousal that organisms are motivated to achieve and maintain.
 - a. sensory arousal
 - b. arousal motive
 - c. sensation seeking
 - d. achievement

5. Henry prefers moderately difficult tasks, wants a career that involves competition, and personal responsibility, and will persist until a task is done. He most likely has a _____.
 - a. high need for arousal
 - b. moderate need for achievement
 - c. high nAch
 - d. moderate need for arousal

6. If you studied for this test solely to avoid a bad grade, it is most likely that you are _____.
 - a. extrinsically motivated to study
 - b. intrinsically motivated to study
 - c. an above average student
 - d. a typical student

7. This is **NOT** characteristic of instincts.
 - a. unlearned
 - b. uniform
 - c. universal
 - d. unique

8. According to the drive-reduction theory, motivation begins with a _____.
 - a. goal
 - b. physiological need
 - c. cognitive need
 - d. motivational need

9. This is **NOT** associated with the incentive theory of motivation.
 - a. external stimuli
 - b. an external “push”
 - c. obtaining reinforcement
 - d. avoiding punishment

Study and Review Guide

10. Nest building is an example of _____.
 - a. drive-reduction
 - b. an incentive motive
 - c. an instinct
 - d. all of these options

11. Cognitive theories of motivation focus on _____.
 - a. attributions for the causes of behavior
 - b. biological factors in thought processes
 - c. previous learning experience
 - d. the role of external stimuli

12. The psychologist associated with a hierarchy of needs is _____.
 - a. Murray
 - b. Freud
 - c. Skinner
 - d. Maslow

13. The _____ component of emotions involves active changes in the body, such as pupil dilation or increased heart rate.
 - a. cognitive
 - b. psychological
 - c. physiological
 - d. behavioral

14. The apparatus commonly used as a "lie detector" is called a(n) _____.
 - a. electroencephalograph
 - b. EEG
 - c. polygraph
 - d. galvanograph

15. Across cultures, people can reliably identify at least _____ basic emotions from a person's facial expression.
 - a. 32
 - b. 15
 - c. 9
 - d. 6

Study Guide

16. You suddenly see an oncoming car in your lane. You swerve to miss it, and your car finally comes to a bouncing halt in the ditch at the side of the road. At this point you notice your high level of fear. This reaction best supports the _____ theory of emotions.
- Cannon-Bard
 - James-Lange
 - two-factor
 - common sense
17. You are kissing your dating partner good night and notice that you are physiologically aroused. You think about your feelings and decide that you are probably in love with this individual. This response best supports the _____ theory of emotions.
- Cannon-Bard
 - James-Lange
 - two-factor
 - companionate love
18. The _____ theory (hypothesis) suggests that an emotional experience and a body reaction occur simultaneously.
- James-Lange
 - two-factor
 - Cannon-Bard
 - facial feedback
19. You grin broadly while your best friend tells you she was just accepted to Harvard Medical School. The facial feedback hypothesis predicts that you will feel _____.
- happy
 - envious
 - lonely
 - all of these emotions
20. This is **NOT** a display rule.
- Lying is immoral.
 - You shouldn't laugh at funerals.
 - Boys don't cry.
 - Students should look interested when their instructor talks in class.

PRACTICE TEST II

1. _____ energizes and directs behavior.
 - a. Emotion
 - b. Motivation
 - c. Serotonin
 - d. Melatonin

2. What do glucose, leptin, and insulin have in common? They all _____.
 - a. motivate arousal
 - b. are released during stressful events
 - c. affect satiety
 - d. are secreted by the hypothalamus

3. The arousal motive causes us to _____ for no apparent reason.
 - a. seek novel and complex stimuli
 - b. become sexually excited
 - c. wake up
 - d. get excited

4. Advance preparation and hard work are the most important ways to combat _____.
 - a. boredom
 - b. obesity
 - c. test anxiety
 - d. all of these options

5. Homeostasis is associated with which of the following theories of motivation?
 - a. instinct
 - b. incentive
 - c. Maslow's hierarchy of needs
 - d. drive-reduction

6. Maslow's theory of motivation suggests that, compared to physiological needs and needs for safety, needs for belonging and self-esteem _____.
 - a. differentiate us from other species
 - b. are satisfied first
 - c. are stronger
 - d. cannot be considered until the physiological and safety needs are met

Study Guide

7. The frontal lobe and limbic system are both involved in _____.
 - a. the experience of emotion
 - b. motivation and desire
 - c. reflexes and instincts
 - d. sham rage experiments

8. During an “emergency,” epinephrine and norepinephrine help maintain the activation of the _____ system.
 - a. limbic
 - b. sympathetic nervous
 - c. parasympathetic nervous
 - d. emotional motivation

9. Senate legislation in 1988 severely restricted the use of _____ in the courts, government, and private industry.
 - a. rational thinking
 - b. democracy
 - c. consensus
 - d. polygraph tests

10. Jamal’s posture is rounded. It is most likely that you perceive him as _____.
 - a. threatening
 - b. dangerous
 - c. warm and friendly
 - d. none of these options; there is not enough information to make a choice

11. Emotional intelligence is characterized by _____.
 - a. knowledge and management of all three emotional components
 - b. empathy with others
 - c. the ability to maintain satisfying relationship
 - d. all of these options

12. Research on emotional intelligence suggests those students with a higher “EQ” _____.
 - a. demonstrate better critical thinking skills
 - b. have higher IQs as well
 - c. are more likely to be athletes
 - d. are no different than students with a lower “EQ”

13. In the _____ theory, physiological responses are distinctly different for each basic emotion.
 - a. Cannon-Bard
 - b. James-Lange
 - c. two-factor
 - d. all of these options

Study and Review Guide

14. You feel anxious because you are sweating and your heart is beating rapidly. This statement illustrates the _____ theory of emotion.
 - a. James-Lange
 - b. two-factor
 - c. Cannon-Bard
 - d. physiological feedback

15. Which of the following research findings supports the Cannon-Bard theory of emotion?
 - a. Animals who are surgically prevented from experiencing physiological arousal still demonstrate emotional behaviors.
 - b. Smiling improves self-ratings of positive mood-states.
 - c. Misinformed or uninformed research participants take on the emotional reactions of others around them.
 - d. There are distinct, though small, differences in the physiological response of several basic emotions.

16. A therapist who believes in the facial feedback hypothesis regarding emotions might prescribe this if you were depressed.
 - a. Prozac
 - b. record your thoughts whenever you feel depressed
 - c. smile at least 3 times a day
 - d. get a PET scan to see if your thalamus is functioning properly

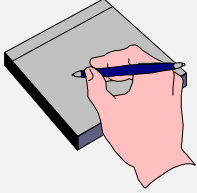
17. Basic simple emotions, like fear and anger, can probably be explained by _____.
 - a. input from higher cortical areas of the brain
 - b. subtle changes in facial expressions
 - c. complex cognitive processing
 - d. the interpretation of environmental stimuli

18. Which of the following children will be more alert and responsive to facial expressions of anger?
 - a. non-abused children
 - b. abused children
 - c. all children
 - d. the vast majority of children pay no attention to parental anger

19. _____ theorists suggested emotions evolved before thought and are important to survival.
 - a. Sociobiological
 - b. Psychobiological
 - c. Behavioral
 - d. Evolutionary

Study Guide

20. Compared to men, women report more intense and frequent experiences of _____ out of the five basic emotions.
- a. one
 - b. three
 - c. four
 - d. five



ANSWERS

The following answers to active learning exercises, fill-ins, matching exercises, and practice tests 1 and 2 provide immediate feedback on your mastery of the material. Try not to simply memorize the answers. When you are unsure of your “guess” or make an error, be sure to go back to the textbook and carefully review. This will greatly improve your scores on classroom exams and quizzes.

ACTIVE LEARNING EXERCISE II

Subjective well-being exercise It may surprise you to learn that all five statements are false! This is a repeat of the questions (pp. 223-224) and the research answers.

1. Among all age groups, America’s senior citizens are the least happy and most dissatisfied with their life. True or False?
2. People who have complete quadriplegia (with both arms and both legs paralyzed) feel their lives are below average in happiness. True or False?
3. Having children is life’s greatest joy; thus, parents report more overall happiness than those who do not have children. True or False?
4. Most people would be happier if they had more money. True or False?
5. People with a college education are happier and report more life satisfaction than those with only a high school diploma. True or False?

#’s 1, 3, and 5. Factors such as age, parenthood, and educational level (as well as race, gender, and physical attractiveness) do NOT play a measurable role in either overall life satisfaction or happiness.

#2 People who have serious physical disabilities are just as happy as others. For example, in one survey of 128 people who had suffered an injury causing quadriplegia, most acknowledged having considered suicide in the beginning. Yet, a year later only 10 percent rated their quality of life as poor (Whiteneck et al., 1985). In general, people seem to overestimate the long-term emotional consequences of tragic events.

#4 Does it surprise you that subjective well being (life satisfaction and happiness) is NOT strongly correlated with income? Research shows that as long as people have enough money to buy essentials, extra money does not buy happiness (Myers and Diener, 1995, 1996). For example, in the past 40 years the average U.S. citizen’s buying power has doubled; yet, the reported happiness has remained almost unchanged (Niemi et al., 1989).

Study Guide

So what factors *are* correlated with subjective well being? Here the answers are less surprising:

- Having close friendships or a satisfying marriage
- Being optimistic and outgoing
- Having a challenging, satisfying job
- A meaningful religious faith
- Having high self-esteem
- Sleeping well and exercising

References:

- Myers, D. G., & Diener, E. (1995). Who is happy? *Psychological Science*, 6, 10-19.
- Myers, D. G., & Diener, E. (1996, May). The pursuit of happiness. *Scientific American*, pp. 70-72.
- Niemi, R. G., Mueller, J., & Smith, T. W. (1989). Trends in public opinion: A compendium of survey data. New York: Greenwood Press.
- Whiteneck, G. G., et al. (1985). A collaborative study of high quadriplegia. Englewood, CO: Rocky Mountain Regional Spinal Cord Injury System for the National Institute of Handicapped Research.

FILL-IN EXERCISES

1. Motivation, emotion; 2. ventromedial hypothalamus; 3. bulimia nervosa; 4. arousal; 5. Achievement motivation (nAch); 6. drive theory, incentive theory; 7. hierarchy of needs; 8. cognitive, physiological, behavioral; 9. facial feedback hypothesis; 10. evolutionary.

MATCHING EXERCISES

a. 5, b. 9, c. 10, d. 1, e. 8, f. 4, g. 3, h. 6, i. 7, j. 2.

<u>PRACTICE TEST I</u>		<u>PRACTICE TEST II</u>	
1. a (p. 392)	11. a (p. 406)	1. b (p. 392)	11. d (p. 414)
2. b (p. 392)	12. d (p. 406)	2. c (p. 394)	12. a (p. 414)
3. c (p. 396)	13. c (p. 409)	3. a (p. 397)	13. b (p. 416)
4. b (p. 397)	14. c (p. 410)	4. c (p. 398)	14. a (p. 416)
5. c (p. 399)	15. d (p. 413)	5. d (p. 405)	15. a (pp. 416-19)
6. a (p. 401)	16. b (p. 416)	6. d (pp. 406-07)	16. c (p. 417)
7. d (p. 404)	17. c (p. 418)	7. a (p. 410)	17. b (p. 420)
8. b (p. 405)	18. c (p. 418)	8. b (p. 410)	18. b (p. 419)
9. b (p. 405)	19. a (p. 417)	9. d (p. 412)	19. d (p. 419)
10.c (p. 405)	20. a (p. 422)	10.c (p. 413)	20. c (p. 422)

Chapter

12

Health
Psychology

OUTLINE (Survey & Question)

This outline is intended to help you *survey* the chapter. As you read through the various sections, write down any *questions* or comments that come to mind in the space provided. This is a valuable part of active learning and the SQ4R method. It not only makes your reading time more enjoyable and active, but it also increases retention and understanding of the material.

TOPIC

NOTES

I. HEALTH PSYCHOLOGY IN ACTION

- A. What Health Psychologists Do
- B. Chronic Pain: The Role of Psychologists in Helping Patients Cope
- C. Smoking: Hazardous to Your Health
- D. Binge Drinking: A Growing Campus Problem

II. STRESS AND ITS ROLE IN HEALTH

- A. Causes of Stress: From Major Life Changes to Minor Hassles

- B. Research Highlight: Procrastination, Performance and Health

- C. Results of Stress: How the Body Responds

III. STRESS AND SERIOUS ILLNESS

- A. Cancer: A Variety of Causes--Even Stress

- B. Cardiovascular Disorders: The Leading Cause of Death in the United States

- C. Gender and Cultural Diversity: The Effects of Lifestyle on Health

IV. COPING WITH STRESS

- A. Emotion-Focused Forms of Coping: Reappraising the Situation

- B. Problem-Focused Forms of Coping: Putting Problem-Solving Skills to Work

- C. Active Learning: Testing Your Understanding

- D. Resources for Effective Coping: From Good Health to Money

E. Specific Coping Strategies: How You Can Reduce Stress



LEARNING OBJECTIVES (Read, Recite & wRite)

While *reading* the chapter, stop periodically and *recite* (or repeat in your own words) the answers to the following learning objectives. It will also help your retention if you *write* your answer in the space provided. (Page numbers refer to the text Psychology in Action, 5th Ed.)

1. Define health psychology, and identify occupational options for health psychologists (pp. 428-429).
2. Define chronic pain and state its prevalence; describe the use of operant conditioning, biofeedback, and relaxation in the treatment of chronic pain (pp. 429-431).
3. Describe consequences of cigarette smoking; explain psychological, social, and biological factors that lead to smoking; and describe methods for prevention and quitting (pp. 432-435).
4. Discuss binge drinking on college campuses; describe how to reduce the social reinforcers that contribute to this problem (pp. 436-437).
5. Differentiate between stress and stressors, eustress and distress (p. 438).
6. Describe the relationship between stress and life changes; explain how appraisal is related to stress (pp. 438-440).
7. Describe research findings related to chronic stressors, daily hassles, frustrations, and conflict; differentiate the three basic conflicts (pp. 441-443).

Study and Review Guide

8. Describe the physiological effects of stress, including the general adaptation syndrome, the suppression of the immune system, and the development of physical disorders (pp. 444-446).
9. Describe how stress-related behavior contributes to the development and progression of cancer (pp. 447-448).
10. Explain the relationship between stress and essential hypertension; describe the negative consequences of this disorder (pp. 448-449).
11. Explain the relationship between stress and heart disease, focusing on the autonomic nervous system, fatty deposits in the arteries, and cholesterol ratios (p. 449).
12. Differentiate between Type A and Type B personalities; describe the research related to Type A personality and heart disease; compare the shotgun and target behavior approaches to behavior modification (pp. 450-451).
13. Discuss cross-cultural research regarding the effects of lifestyle on health (pp. 451-452).
14. Compare and contrast emotion-focused and problem-focused forms of coping with stress, and provide an example of each (pp. 453-454).
15. Describe how each of the following resources improves coping: health and energy, positive beliefs, an internal locus of control, social skills, social support, and material resources (pp. 454-456).
16. Explain how relaxation, exercise, and self-care can reduce stress (pp. 456-458).



KEY TERMS (Review)

The *review* step in the SQ4R method is very important to your performance on quizzes and exams. Upon completion of this chapter, you should be able to define the following terms.

Approach-Approach Conflict: _____

Approach-Avoidance Conflict: _____

Avoidance-Avoidance Conflict: _____

Binge Drinking: _____

Chronic Pain: _____

Conflict: _____

Coping: _____

Distress: _____

Study and Review Guide

Electromyograph (EMG): _____

Emotion-Focused Forms of Coping: _____

Endorphins: _____

Essential Hypertension: _____

Eustress: _____

Frustration: _____

General Adaptation Syndrome: _____

Hassles: _____

Health Psychology: _____

Heart Disease: _____

Hypertension: _____

Study and Review Guide

Internal Locus of Control: _____

Problem-Focused Forms of Coping: _____

Relaxation Techniques: _____

Shotgun Approach: _____

Stress: _____

Stressor: _____

Target Behavior Approach: _____

Type-A Personality: _____

Type-B Personality: _____



ACTIVE LEARNING EXERCISES (Recite)

The *recite* step in the SQ4R method requires you to be an ACTIVE learner. By completing the following exercises, you will test and improve your mastery of the chapter material, which will also improve your performance on quizzes and exams. Answers to some exercises appear at the end of this study guide chapter.

ACTIVE LEARNING EXERCISE I

After reading pages 453-454 of the text, try identifying both an emotion-focused and a problem-focused coping strategy for each of the following situations:

1. It is the first day of classes for a new semester and about five minutes into your first class you realize you are in classroom 242 not room 424. This is a physics class not a psychology class.
2. Your significant other has just told you that he/she is in love with someone else and is getting married next August.
3. Your car has stalled on a deserted country road. As you start to get out to check the problem, two large dogs run up to your door and start barking and growling at you.
4. Your car insurance has just been cancelled because of a mistake in your driving record.
5. You come to your history class expecting a normal lecture class, but you discover this is the day of the first major examination.

ACTIVE LEARNING EXERCISE II

Making Sound Decisions (A Cognitive Skill)

Good decision-makers take full responsibility for their own future. They realize they are the only ones who can truly evaluate the merits and potential costs of each alternative. A critical thinker also recognizes that decisions are often stressful, but cannot be avoided. Avoiding a decision is, in fact, making one without the benefit of a careful analysis of the problem. To improve your decision-making skills, we offer the following exercise (adapted from Seech, 1987):

Study and Review Guide

1. At the top of the chart, identify an ongoing personal conflict as approach-approach, avoidance-avoidance, or approach-avoidance.
2. On the lines in the left-hand column, list all possible alternatives or possible courses of action. Although the wording of the "approach-approach" discussion may imply only two choices, most conflicts involve several options or alternatives. Identifying all your options will require a good deal of homework. Read up on your problem. Talk to as many people as you can.
3. Now list the logical outcome or consequence of each alternative, regardless of whether the consequence is significant or insignificant and regardless of whether it is a certain or a possible outcome.
4. Next assess both the probability and significance of each outcome. Using a 0 to 5 rating scale (0 = won't occur and 5 = certain to occur), assign a numerical rating for the likelihood that each consequence will actually occur. Using a similar 0 to 5 rating scale (0 = no significance and 5 = high significance), assess the importance you place on each consequence.
5. Now review the chart. In some cases, you may find it helpful to multiply your probability and significance ratings and then compare your results for the various alternatives. In other cases, you will find it difficult to assign numerical values to complex issues and feelings. Even in the most difficult decisions, however, the thinking and evaluation elicited by this chart may provide useful insights to your conflict. Also note the feelings you associate with each alternative. Careful decision making tries to integrate feelings and cognitions.
6. After you've reviewed each alternative, ask yourself which choice is most in line with your overall goals and values. Some alternatives may look more-or less appealing when weighed against long-term relationship plans, career goals, and personal belief systems. You may want to discuss your chart with a trusted friend before you make a final decision.
7. Once you make your decision, commit yourself and give it all you've got. Throw away your expectations. Many decisions don't turn out the way we imagine, and if we focus on the way it is supposed to be we miss enjoying the way it is. On the other hand, if the decision is wrong, don't be afraid to change or correct your course. ("When you're in a hole, stop digging!")

TYPE OF CONFLICT: _____

Alternatives	Logical Outcome	Probability	Significance
1.			
2.			
3.			



CHAPTER OVERVIEW (Review)

The following CHAPTER OVERVIEW provides a narrative overview of the main topics covered in the chapter. Like the Visual Summary found at the end of each chapter in the text, this narrative summary provides a final opportunity to review chapter material.

I. Health Psychology *Health psychology is the study of the relationship between psychological behavior and physical health and illness, with an emphasis on wellness and the prevention of illness.*

Health psychologists work with patients who are about to undergo complex surgical procedures by teaching them what to anticipate during and after the operation and by giving them and their families suggestions for dealing with psychological problems that may develop following surgery. Health psychologists help chronic pain patients cope with their pain through operant conditioning, biofeedback, and relaxation techniques.

Because smoking is the single most preventable cause of death and disease in the United States, prevention and cessation of smoking are of primary importance to all health practitioners, including health psychologists.

Smoking prevention programs involve educating the public about short- and long-term consequences of smoking, trying to make smoking less socially acceptable and helping nonsmokers resist social pressures to smoke. Most approaches to help people quit smoking include cognitive and behavioral techniques to aid smokers in their withdrawal from nicotine and techniques for dealing with social pressure.

Binge drinking is a serious problem on college campuses. It occurs when a man has 5 or more and a woman has 4 or more drinks in a row. An alarming 2 of 5 college students are binge drinkers. Binge drinking is a serious problem because it can lead to death from alcohol poisoning or automobile or other accidents, and it can lead to assault or rape.

To reduce college-age drinking, students' attitudes need to be changed. They need to be taught that binge drinking is not normal behavior for a college student, that drinking can lead to dangerous and harmful consequences, and that the entire college community, from administrators to alumni, actively discourage drinking on campus and at all college functions.

II. Stress and Its Role in Health *Stress is the body's nonspecific response to any demand made on it. Any stimulus that causes stress is called a stressor. There are both beneficial and nonbeneficial types of stress.*

The major causes of stress are life changes, chronic stress, hassles, frustration, and conflicts. Hassles are little everyday life problems that pile up to cause major stress. Frustrations have to do with blocked goals. Conflicts can be classified as approach-approach, avoidance-avoidance, or approach-avoidance.

When stressed, the body undergoes physiological changes. The sympathetic part of the autonomic nervous system is activated, increasing heart rate and blood pressure. This sympathetic activation is beneficial if people need to fight or flee, but in modern times it generally has negative consequences.

Hans Selye described a generalized physiological reaction to severe stressors, which he called the general adaptation syndrome. It has three phases: the alarm reaction, the resistance phase, and the exhaustion phase.

Prolonged stress can suppress the immune system that can render the body susceptible to any number of diseases, from colds and flu to cancer and heart disease.

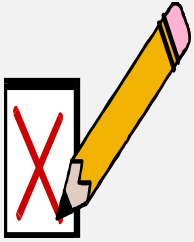
III. Stress and Serious Illness *Cancer appears to be caused by an interaction of heredity, environment (for example, smoking cigarettes), and changes in body chemistry that affect how certain cells within the body replicate. During times of stress, the body may be less able to check cancerous tissue growth because the immune system is suppressed.*

The leading cause of death in the United States is cardiovascular disease, and in particular, essential hypertension and heart disease. Risk factors in heart disease include smoking, stress, obesity, a high-fat diet, lack of exercise, and Type A personality traits if they include cynicism and hostility. The two main approaches to modifying Type A behavior are the shotgun approach and the target behavior approach. The Ni-Hon- San study and the adventist Health Study point out the significant role of the Western lifestyle in coronary heart disease and cancer.

IV. Coping with Stress *The two major forms of coping with stress are emotion-focused and problem-focused. Emotion-focused forms change how we view stressful situations. Problem-focused forms deal directly with the situation or the factor causing the stress so as to decrease or eliminate it.*

The ability to cope with a stressor also depends on the resources available to a person. Resources include health and energy, positive beliefs, an internal locus of control, social skills, social support, and material resources. Relaxation, exercise, and self-care strategies are active methods people can use to cope with stress.

SELF-TESTS (Review & write)



Completing the following SELF-TESTS will provide immediate feedback on how well you have mastered the material. In the *fill-in exercises*, write the appropriate word or words in the blank spaces. The *matching exercise* requires you to match the terms in one column to their correct definitions in the other. For the *multiple-choice questions* in Practice Tests I and II, circle or underline the correct answer. When you are unsure of any answer, be sure to highlight or specially mark the item and then go back to the text for further review. Correct answers are provided at the end of this study guide chapter.

FILL-IN EXERCISES

1. The study of the relationship between psychological behavior and physical health and illness is known as _____ (p. 428).
2. An increase in activity and exercise levels can be beneficial to pain patients because exercise increases the release of _____ (p. 430).
3. According to the U.S. Department of Health and Human Services, the single most preventable cause of death and disease in the United States is _____ (p. 432).
4. _____ occurs when a man consumes 5 or more drinks in a row or a woman consumes 4 or more (p. 436).
5. The text defines stress as “ a _____ response of the body to any _____ made on it (p. 438).
6. Selye called _____ beneficial, pleasant, or desirable stress (p. 438).
7. Having to choose between two alternatives that will both lead to undesirable results is known as a(n) _____ conflict (p. 443).
8. The three-phase bodily response to chronic stress (Selye’s general adaptation syndrome), includes the _____, the _____, and the _____ (p. 445).
9. Being hard driving, competitive, ambitious, impatient, and hostile is characteristic of the _____ personality; whereas having a laid-back, calm, relaxed attitude toward life is typical of the _____ personality (p. 450).

10. If you decide to confront a coworker to tell him/her that they are not doing their share of the work, you are using a _____ coping strategy (p. 453).

MATCHING EXERCISES

Column A

Column B

- | | |
|-----------------------------|--|
| a. Problem-Focused Strategy | 1. ____ Small everyday problems. |
| b. Defense Mechanisms | 2. ____ State of chronically elevated blood pressure. |
| c. Hassles | 3. ____ Signals when muscles are relaxed. |
| d. Frustration | 4. ____ Unpleasant state from two or more competing goals. |
| e. Electromyograph | 5. ____ Conflict with both desirable and undesirable goals. |
| f. Type A personality | 6. ____ Unconscious strategies that protect the ego. |
| g. Hypertension | 7. ____ Deals directly with the stress with problem-solving. |
| h. Approach-Avoidance | 8. ____ Alarm reaction, resistance, and exhaustion phase. |
| i. Hans Selye | 9. ____ Unpleasant state resulting from blocked goal. |
| j. Conflict | 10. ____ Ambitious, competitive, hard driving. |

PRACTICE TEST I

- The study of the relationship between psychological behavior and physical health/illness, with a large emphasis on "wellness" and the prevention of illness, is the definition of _____.
 - environmental psychology
 - Gestalt psychology
 - humanistic psychology
 - health psychology
- Which of the following statements about chronic pain is true?
 - Chronic pain should never last longer than a few days.
 - It has been estimated that as many as one-third of all Americans have, at one time or another, suffered from chronic pain.
 - Chronic pain is the leading cause of drug addiction in the 45- to 60-year-old age group.
 - Chronic pain is necessary for survival.
- Which of the following has been used in an attempt to alleviate chronic pain?
 - monosodium glutamate therapy
 - biofeedback
 - epinephrine injections
 - complaint-catharsis therapy

Study and Review Guide

4. Naturally produced brain chemicals that reduce pain perception are called _____.
 - a. opiates
 - b. adrenaline
 - c. endorphins
 - d. epinephrine

5. According to the U.S. Department of Health and Human Services, what is the single most preventable cause of death and disease in the United States?
 - a. cigarette smoking
 - b. lack of exercise
 - c. overeating
 - d. heart disease

6. Smoking behavior is maintained by a combination of _____.
 - a. positive and negative punishment
 - b. positive and negative reinforcement
 - c. positive reinforcement and negative punishment
 - d. positive punishment and negative reinforcement

7. Hans Selye defines stress as the _____.
 - a. reaction of the autonomic nervous system to a specific challenge imposed from outside the body
 - b. nonspecific response of the body to any demand made on it
 - c. activation of the sympathetic nervous system
 - d. intellectual response made to any stressor

8. A stressor is _____.
 - a. a stimulus that causes stress
 - b. relative to each culture and everyone within a culture will experience the same stressors
 - c. roughly equivalent to punishment
 - d. anything that causes bad things to happen

9. The three phases of the general adaptation syndrome are _____.
 - a. preparation, alarm reaction, incubation
 - b. alarm reaction, incubation, resistance
 - c. alarm reaction, resistance, exhaustion
 - d. incubation, resistance, exhaustion

10. Trying to decide which of two equally good concerts to attend on a Friday night is a(n) _____.
 - a. approach-avoidance conflict
 - b. avoidance-avoidance conflict
 - c. approach-approach conflict
 - d. transitory positive conflict

Study and Review Guide

11. The _____ controls the physiological changes associated with stress.
 - a. spinal cord
 - b. autonomic nervous system
 - c. thalamus
 - d. brain and spinal cord

12. This is **NOT** a factor known to contribute to the onset of cancer.
 - a. heredity
 - b. essential hypertension
 - c. environment
 - d. immune system changes

13. Essential hypertension is _____.
 - a. a disorder of the heart muscle
 - b. a major cause of cancer in males
 - c. elevated blood pressure with no related medical cause
 - d. elevated blood pressure because of kidney failure

14. The Type-A behavior pattern is associated with _____.
 - a. chronic pain
 - b. cancer
 - c. smoking cigarettes
 - d. heart disease

15. _____ is **NOT** a type of heart disease.
 - a. atherosclerosis
 - b. stroke
 - c. angina
 - d. heart attack

16. Slow normal speech, relaxed and comfortable posture, and a good sense of humor are characteristics of _____.
 - a. brain disease
 - b. Type-A behavior
 - c. Type-B behavior
 - d. Alzheimer's disease

17. Many psychological defense mechanisms are examples of _____.
 - a. emotion-focused forms of coping with stress
 - b. psychosis
 - c. problem-focused forms of coping with stress
 - d. hassles

Study and Review Guide

18. Which of the following is a good resource for effective coping with stress?
- positive beliefs
 - alcohol
 - social isolation
 - increased eating
19. Exercise can help reduce which of the following results of stress?
- high levels of phenylalanine
 - stress hormone levels in the bloodstream
 - levels of norepinephrine in the brain
 - aerobic stamina
20. Life changes may affect health because they _____.
- increase the number of hassles
 - cause us to reassess our life style
 - are always the result of something bad happening
 - are known to increase the level of cortisol above normal

PRACTICE TEST II

1. _____ was the major cause of death in the U.S. in 1996.
- Drunk driving
 - AIDS
 - Heart disease
 - Influenza
2. In the U.S. in 1996, women of color and _____ had a life expectancy of 76.1 years.
- white men
 - men of color
 - white women
 - all other men and women
3. Psychological factors _____ chronic pain.
- are unrelated to
 - are usually the source or cause of
 - can maintain or intensify
 - often cause, maintain, and intensify

Study and Review Guide

4. Lack of family participation is most likely to undermine the effects of _____ for chronic pain patients.
 - a. endorphins
 - b. behavioral modification programs
 - c. pharmacological treatments
 - d. all of these options

5. Chronic pain from tension headaches and lower back pain has been effectively treated by _____.
 - a. EMG biofeedback
 - b. EEG biofeedback
 - c. psychopharmacology
 - d. prayer

6. A(n) _____ locus of control is associated with better recovery from chronic pain.
 - a. extrinsic
 - b. internal
 - c. heightened
 - d. relaxed

7. An increase in acetylcholine and norepinephrine is associated with _____.
 - a. nicotine
 - b. any alcohol consumption
 - c. binge drinking
 - d. all of these options

8. Once you begin smoking, you continue or smoke more because it takes away withdrawal symptoms. This is related to _____.
 - a. positive punishment
 - b. negative punishment
 - c. positive reinforcement
 - d. negative reinforcement

9. Binge drinking is most associated with _____.
 - a. college students
 - b. members of fraternities and sororities
 - c. teenagers
 - d. all of these groups, equally

10. A pleasant, nonspecific physiological response to any internal or external demand is called _____.
 - a. eustress
 - b. love
 - c. happiness
 - d. euphoria

Study and Review Guide

11. Lazarus suggests that cognitive appraisals play an important role in determining _____.
 - a. your career, college courses, and relationship choices
 - b. whether or not something is stressful
 - c. health-related behavioral choices
 - d. whether or not you are happy and healthy

12. If you have a job that is demanding and requires a lot of concentration, without opportunities for advancement or creativity, it is most likely that you will _____.
 - a. quit
 - b. demand more money
 - c. experience more distress
 - d. experience more eustress

13. A conflict is defined as a negative emotional state caused by _____.
 - a. other people
 - b. your own cognitive appraisals
 - c. having to choose between incompatible goals
 - d. a blocked goal

14. Compared to non-procrastinators, students who procrastinate on class assignments _____.
 - a. get higher grades because they work better under pressure
 - b. drop out of college in greater numbers
 - c. have fewer illnesses because they are less stressed
 - d. receive lower grades on term papers

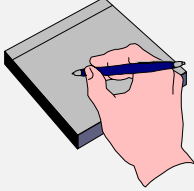
15. Chest pain due to an insufficient blood supply to the heart is called _____.
 - a. angina
 - b. heart disease
 - c. atherosclerosis
 - d. a heart attack

16. When Japanese men moved from Japan to Honolulu or San Francisco, coronary heart disease was found to be more prevalent in the men who _____.
 - a. moved to Honolulu
 - b. moved to San Francisco
 - c. moved to either city
 - d. acculturated in either city

17. When you focus on decreasing or eliminating a stressor, you are using _____.
 - a. emotion-focused coping
 - b. problem-focused coping
 - c. a problem-solving set
 - d. a practical defense mechanism

Study and Review Guide

18. Compared to emotion-focused coping strategies, problem-focused strategies are ____.
- a. much more effective
 - b. slightly more effective
 - c. equally effective
 - d. more effective in some situations, less effective in others
19. Taking this practice test is a(n) ____ form of coping.
- a. emotion-focused
 - b. overachiever's
 - c. problem-focused
 - d. ineffective
20. This is **NOT** an effective coping resource.
- a. an external locus of control
 - b. an internal locus of control
 - c. positive beliefs
 - d. social support



ANSWERS

The following answers to active learning exercises, fill-ins, matching exercises, and practice tests 1 and 2 provide immediate feedback on your mastery of the material. Try not to simply memorize the answers. When you are unsure of your “guess” or make an error, be sure to go back to the textbook and carefully review. This will greatly improve your scores on classroom exams and quizzes.

FILL-IN EXERCISES

a. health psychology; 2. endorphins; 3. cigarette smoking; 4. Binge drinking; 5. nonspecific, demand; 6. eustress; 7. avoidance-avoidance; 8. alarm reaction, phase of resistance, stage of exhaustion; 9. Type A, Type B; 10. Problem-focused.

MATCHING EXERCISES

a. 7, b. 6, c. 1, d. 9, e. 3, f. 10, g. 2, h. 5, i. 8, j. 4.

<u>PRACTICE TEST I</u>		<u>PRACTICE TEST II</u>	
1. d (p. 428)	11. b (p. 444)	1. c (p. 428)	11. b (p. 439)
2. b (p. 429)	12. b (p. 446)	2. d (p. 428)	12. c (p. 441)
3. b (p. 430)	13. c (p. 448)	3. c (p. 429)	13. c (p. 443)
4. c (p. 430)	14. d (p. 450)	4. b (p. 430)	14. d (p. 444)
5. a (p. 432)	15. b (p. 449)	5. a (p. 430)	15. a (p. 449)
6. b (p. 434)	16. d (p. 450)	6. b (p. 430)	16. d (p. 451)
7. b (p. 438)	17. a (p. 453)	7. a (p. 432)	17. b (p. 453)
8. a (p. 438)	18. a (p. 455)	8. d (p. 434)	18. d (pp. 453-54)
9. c (p. 445)	19. b (p. 457)	9. b (p. 437)	19. c (p. 453)
10.c (p. 443)	20. a (p. 441)	10.a (p. 438)	20. a (p. 455)

Chapter

13

Personality

OUTLINE (Survey & Question)

This outline is intended to help you *survey* the chapter. As you read through the various sections, write down any *questions* or comments that come to mind in the space provided. This is a valuable part of active learning and the SQ4R method. It not only makes your reading time more enjoyable and active, but it also increases retention and understanding of the material.

TOPIC

NOTES

I. PERSONALITY ASSESSMENT

- A. How We Measure Personality: Four Major Methods
- B. Active Learning: Why Are "Pseudo" Personality Tests So Popular?
- C. Are Personality Measurements Accurate?: Evaluating the Methods

II. TRAIT THEORIES

- A. Early Trait Theorists: Allport, Cattell, and Eysenck

- B. The "Big 5" Model: Five Basic Personality Traits

- C. Evaluating Trait Theories: The Pros and Cons

III. PSYCHOANALYTIC THEORIES

- A. Freud's Psychoanalytic Theory: The Power of the Unconscious

- B. Research Highlight: Terror Management Theory and the Unconscious Mind

- C. Neo-Freudian Theories: Revising Freud's Ideas

- D. Gender and Cultural Diversity: Horney, Freud, and Penis Envy

- E. Evaluating Psychoanalytic Theories: Five Areas of Criticism

IV. HUMANISTIC THEORIES

- A. Carl Rogers: The Self-Concept Theory of Personality

- B. Abraham Maslow: The Search for Self-Actualization

- C. Evaluating Humanistic Theories: Three Major Criticisms

V. SOCIAL/COGNITIVE PERSPECTIVE

- A. Bandura's and Rotter's Approaches: Social Learning Plus Cognitive Processes
- B. Evaluating Social/Cognitive Theory: The Pluses and Minuses

VI. BIOLOGICAL THEORIES

- A. Three Major Contributors: The Brain, Neurochemistry, and Genetics
- B. Interactionism: Pulling the Perspectives Together
- C. Gender and Cultural Diversity: Cultural Concepts of "Self"



LEARNING OBJECTIVES (Read, Recite & write)

While *reading* the chapter, stop periodically and *recite* (or repeat in your own words) the answers to the following learning objectives. It will also help your retention if you *write* your answer in the space provided. (Page numbers refer to the text Psychology in Action, 5th Ed.)

1. Define personality and explain the scientific standards that allow today's psychologists to more accurately measure personality than they did in the past (p. 464).
2. Briefly describe how interviews and observations are used to assess personality (p. 465)

Study Guide

3. List four multitrait objective tests; briefly describe the characteristics of the MMPI/MMPI-2; differentiate between vocational interest, aptitude, and achievement tests (pp. 465-467).
4. Briefly describe the characteristics of a Rorschach inkblot test and the Thematic Apperception Test (pp. 467-469).
5. Discuss three logical fallacies that explain the widespread acceptance of “pseudo” personality tests (p. 468).
6. Discuss the relative strengths and weaknesses of the four major methods of personality assessment (p. 469).
7. Describe the evolution of the trait theories of personality from Allport to Cattell, to Eysenck, ending with the Big Five model (pp. 470-472).
8. Discuss the research findings regarding the Big Five model of personality and the three major criticisms regarding trait theories, in general (pp. 473-474).
9. Describe how trait theories differ from the psychoanalytic theory of personality; differentiate among Freud’s three levels of consciousness: conscious, preconscious, and unconscious (pp. 475-477).
10. Discuss current research regarding terror management theory and evidence for the existence of unconscious information processing (p. 479).

Study and Review Guide

11. Define id, ego, and superego, and discuss how the pleasure principle, reality principle, and morality principle correspond to each of these personality structures. Define and explain the role of defense mechanisms employed by the ego (pp. 477-478, 480).
12. Discuss Freud's five stages of psychosexual development and the effects of successful or unsuccessful completion at each stage (pp. 480-482).
13. Compare Freud's original theories to the approaches of the Neo-Freudians: Adler, Jung, and Horney (pp. 482-485).
14. Discuss the five major criticisms of psychoanalytic theories (pp. 485-486).
15. Discuss humanistic theories of personality, comparing the approaches of Rogers and Maslow (pp. 487-490).
16. Discuss three of the major criticisms of humanistic theories (p. 490).
17. Discuss social-cognitive theories of personality, comparing the approaches of Bandura and Rotter; state two strengths and two weaknesses of these theories (pp. 491-493).
18. Describe the role of brain structures, neurochemistry, and genetic advances in biological theories of personality (pp. 493-494).
19. Describe how the interactionist approach to personality is blending views based on research findings (p. 494).

Study Guide

20. Describe how cultural variations in the concepts of the “self” affect the study of personality (pp. 494-496).



KEY TERMS (Review)

The *review* step in the SQ4R method is very important to your performance on quizzes and exams. Upon completion of this chapter, you should be able to define the following terms.

Anal Stage: _____

Archetypes: _____

Basic Anxiety: _____

Behavioral Genetics: _____

Collective Unconscious: _____

Conscious: _____

Defense Mechanism: _____

Study and Review Guide

Ego: _____

Factor Analysis: _____

Five-Factor Model: _____

Genital Stage: _____

Id: _____

Inferiority Complex: _____

Interactionism: _____

Latency Stage: _____

Locus of Control: _____

Oedipus Complex: _____

Oral Stage: _____

Study Guide

Personality: _____

Phallic Stage: _____

Phenomenological Perspective: _____

Pleasure Principle: _____

Preconscious: _____

Projective Tests: _____

Psychosexual Stages: _____

Reality Principle: _____

Reciprocal Determinism: _____

Repression: _____

Study and Review Guide

Rorschach Inkblot Test: _____

Self-Actualization: _____

Self-Concept: _____

Self-Efficacy: _____

Self-Esteem: _____

Superego: _____

Thematic Apperception Test (TAT): _____

Trait: _____

Unconditional Positive Regard: _____

Unconscious: _____



ACTIVE LEARNING EXERCISES (Recite)

The *recite* step in the SQ4R method requires you to be an ACTIVE learner. By completing the following exercises, you will test and improve your mastery of the chapter material, which will also improve your performance on quizzes and exams. Answers to some exercises appear at the end of this study guide chapter.

ACTIVE LEARNING I

One way to understand personality and its assessment is to practice testing your friends and family members. In Chapter 13, you were given the following “Try This Yourself” exercise:

Before going on, answer “true” or “false” to the following:

- 1 People get ahead in this world primarily by luck and connections rather than their own hard work and perseverance.*
- 2 When someone doesn't like you there is little you can do about it.*
- 3 No matter how hard I study; I can't get high grades in most classes.*
- 4 I sometimes keep a rabbit's foot or other special objects as good-luck charms.*
- 5 I sometimes refuse to vote because little can be done to control what politicians do in office.*

Using these same five statements, ask at least 10 women and 10 men from your family and friends to complete this test. Be sure NOT to introduce it as an “internal versus external” scale, which could bias their responses. Once you collect their answers and analyze the data, you will probably find female scores are slightly more *external* than males (i.e., they are more likely to answer true to each of the five statements). Can you explain this? Would there also be an age or ethnicity difference? Why or why not? If you would like to read more about this topic and see the original full-length version of Rotter's internal external scale, check out the following reference:

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs, 80, 1-28.

ACTIVE LEARNING II

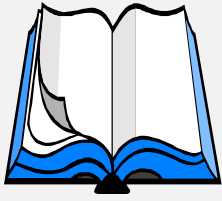
Employing Precise Terms: Defense Mechanisms (A Behavioral Skill)

A critical thinker is capable of reading a description of an event and determining if this event matches a given situation or individual. Thus, if presented with a number of behavioral descriptions of an individual, such as defense mechanisms, the critical thinker should be able to determine which mechanism best applies in a given situation.

By Freud's definition, defense mechanisms operate at the unconscious level; thus, we are not aware when we are using them. If, however, we practice observing their use by others, we may improve our self-insight. This also may help us replace inappropriate defense mechanisms with more appropriate behaviors.

Identify the following defense mechanisms (answers are at the end of this study guide chapter).

1. A woman who was assaulted and raped several years ago in a terrifying attack has forgotten the incident. _____
2. John told his fiancée Susan about his ongoing sexual involvement with other women, but Susan refuses to believe it even when she's seen him kissing other women. _____
3. Laleh has just read several articles describing danger signals for skin cancer. She carefully examines a dangerous looking mole on her own neck, and then with her doctor she calmly and academically discusses the pros and cons of various treatment strategies and the fact that her mother died from skin cancer. _____
4. Matt received notice that he is on academic probation. Since he will not be playing football while on probation, he decides to drop out of college "to do something worthwhile." _____
5. The President of Parents Against Pornography was extremely active in campaigning against the "filth" our children are exposed to on the Internet. He was later arrested and convicted of 40 counts of soliciting minors on the Internet. _____



CHAPTER OVERVIEW (Review)

The following CHAPTER OVERVIEW provides a narrative overview of the main topics covered in the chapter. Like the Visual Summary found at the end of each chapter in the text, this narrative summary provides a final opportunity to review chapter material.

I. Personality Assessment *Personality is defined as an individual's relatively stable and enduring pattern of thoughts, emotions, and actions. Psychologists assess, describe, explain, and predict personality according to different theoretical orientations.*

Psychologists use four methods to measure or assess personality: interviews, observations, objective tests, and projective techniques. Reliability and validity are the major criteria for evaluating the accuracy of personality tests.

Personality is most commonly measured through objective tests (such as the MMPI-2), which ask test-takers to respond to paper-and-pencil questionnaires or inventories. These tests provide objective standardized information about a large number of personality traits, but they have their limits, including deliberate deception and social desirability bias, diagnostic difficulties, and inappropriate use.

Projective techniques ask test-takers to respond to ambiguous stimuli (such as the Rorschach "inkblot" or the TAT pictures). Though these tests are said to provide insight into unconscious elements of personality, they are not very reliable or valid.

II. Trait Theories *Trait theorists believe personality consists of relatively stable and consistent characteristics. Early theorists like Allport, Cattell, and Eysenck worked to identify the smallest number of identifying traits. More recently, researchers identified a Five-Factor Model (FFM) that can be used to describe most individuals. The "Big 5" traits are openness, conscientiousness, extroversion, agreeableness, and neuroticism.*

III. Psychoanalytic Theories *Freud founded the psychoanalytic approach to personality, which emphasized the power of the unconscious. The mind (or psyche) reportedly functions on three levels (conscious, preconscious, and unconscious), and the personality has three distinct structures (id, ego, and superego). The ego struggles to meet the demands of the id and superego, and when these demands are in conflict the ego may resort to defense mechanisms to relieve the resultant anxiety.*

According to Freud, all human beings pass through five psychosexual stages: oral, anal, phallic, latency, and genital. How specific conflicts at each of these stages are resolved is important to personality development.

Three influential followers of Freud who broke with him were Adler, Jung, and Horney. Known as neo-Freudians, they emphasized different issues. Adler emphasized the "inferiority complex" and the compensating "will-to-power." Jung introduced the "collective unconscious" and "archetypes." Horney stressed the importance of "basic anxiety" and refuted Freud's idea of "penis envy," replacing it with "power envy."

Study and Review Guide

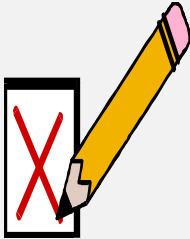
Critics of the psychoanalytic approach, especially Freud's theories, argue that it is difficult to test, overemphasizes biology and unconscious forces, has inadequate empirical support, is sexist, and lacks cross-cultural support. Despite these criticisms, Freud remains a notable pioneer in psychology.

IV. Biological Theories *Biological theories emphasize the brain, neurochemistry, and inherited genetic components of personality. Research on specific traits such as sensation seeking and extroversion strongly support the biological approach.*

The interactionist approach suggests that the major theories overlap and each contributes to our understanding of personality.

Most theories of personality are biased toward Western, individualistic cultures and their perception of the "self." Recognizing and understanding this bias helps keep our study of personality in perspective.

SELF-TESTS (Review & wRite)



Completing the following SELF-TESTS will provide immediate feedback on how well you have mastered the material. In the *fill-in exercises*, write the appropriate word or words in the blank spaces. The *matching exercise* requires you to match the terms in one column to their correct definitions in the other. For the *multiple-choice questions* in Practice Tests I and II, circle or underline the correct answer. When you are unsure of any answer, be sure to highlight or specially mark the item and then go back to the text for further review. Correct answers are provided at the end of this study guide chapter.

FILL-IN EXERCISES

1. An individual's relatively stable and enduring pattern of thoughts, feelings, and actions is known as _____; whereas a relatively stable and consistent characteristic that can be used to describe someone is known as a _____ (pp. 464, 470).
2. Two important criteria for evaluating the usefulness of tests used to assess personality are _____ and _____ (p. 464).
3. The _____ is an objective, self-report test that was developed for the purpose of psychiatric diagnosis (p. 465).
4. If you are imaginative, curious, open to new ideas, and interested in cultural pursuits, on the "Big 5" model of personality you would score high on _____ (p. 472).
5. _____ theories attempt to *explain* personality by examining unconscious forces, while _____ theories tend to *describe* personality as it currently exists (p. 475).
6. According to Freud, thoughts or information we are currently aware of or are remembering are part of our _____, while the _____ contains thoughts or information we can become aware of easily, and the _____ contains our hidden thoughts, motives, impulses, and desires (p. 476).
7. The id is often described as operating on the _____, while the ego operates on the _____ (pp. 477-478).
8. According to Rogers, all the information and beliefs individuals have about their own nature, qualities, and behavior are known as their _____ (p. 488).

Study and Review Guide

9. According to Bandura, an individual's cognitions, behaviors, and the learning environment interact to produce personality. This is known as _____ (pp. 491-492).
10. The _____ approach represents a blending of several theories of personality (p. 495).

MATCHING EXERCISES

Column A

- a. Bandura
- b. Rorschach
- c. Five-Factor Model
- d. Interactionism
- e. Rotter
- f. Maslow
- g. Humanistic Theories
- h. Jung
- i. Psychoanalytic Theory
- j. Rogers

Column B

1. ____ Self-concept and unconditional positive regard.
2. ____ Major personality theories overlap and contribute.
3. ____ Focuses on self-actualization.
4. ____ Focuses on unconscious forces.
5. ____ Phenomenological perspective.
6. ____ OCEAN.
7. ____ Cognitive expectancies and locus of control.
8. ____ Collective unconscious and archetypes.
9. ____ Self-efficacy and reciprocal determinism.
10. ____ Projective "inkblot" test.

PRACTICE TEST I

1. The MMPI is an example of a(n) _____.
 - a. projective test
 - b. personality interview
 - c. objective personality test
 - d. multiple-measure of personality
2. The _____ is a widely used self-report test that determines the presence of disturbed personality characteristics.
 - a. 16 PF
 - b. MMPI
 - c. Internal-External Locus of Control Test
 - d. structured interview
3. Which of the following is a projective test?
 - a. 16 PF
 - b. MMPI
 - c. TAT
 - d. Internal-External Locus of Control Test

Study Guide

4. The Rorschach tests a person's responses to _____.
 - a. pictures
 - b. movies
 - c. sentences
 - d. inkblots

5. According to Hans Eysenck, personality is a relationship between all but which one of these traits?
 - a. extraversion-introversion
 - b. neuroticism
 - c. trustworthiness
 - d. psychotism

6. _____ is **NOT** associated with trait theories of personality.
 - a. Cattell
 - b. Allport
 - c. Rorschach
 - d. Eysenck

7. This is **NOT** one of the “Big 5” personality traits.
 - a. openness
 - b. conscientiousness
 - c. egoism
 - d. agreeableness

8. According to Freudian theory, the _____ is the part of the psyche that provides instinctual motivation for behavior.
 - a. id
 - b. superego
 - c. ego
 - d. ego-ideal

9. The first and most basic defense mechanism that keeps unacceptable impulses out of conscious awareness is _____.
 - a. repression
 - b. denial
 - c. rationalization
 - d. displacement

Study and Review Guide

10. The Oedipus Complex is the major conflict during the _____ stage in Freud's theory of psychosexual development.
 - a. oral
 - b. latent
 - c. genital
 - d. phallic

11. Compared with Freudian theory, neo-Freudian approaches tend to emphasize the _____.
 - a. importance of the superego
 - b. unconscious mind
 - c. impact of social and cultural influences
 - d. importance of sexual impulses

12. The concept of "will to power" that causes children to strive to be superior to others and develop their own capacities was formulated by _____.
 - a. Freud
 - b. Erikson
 - c. Adler
 - d. Jung

13. The collective unconscious contains _____.
 - a. a personal unconscious
 - b. your conscience
 - c. the ego-ideal
 - d. archetypes

14. According to Rogers, all but one of the following are innate biological capacities found in all human beings.
 - a. self-efficacy
 - b. mental health
 - c. congruence
 - d. self-esteem

15. This term is most associated with Maslow.
 - a. will to power
 - b. basic anxiety
 - c. self-actualization
 - d. congruence

Study Guide

16. Humanistic approaches to personality emphasize the importance of _____.
 - a. intrapsychic conflicts
 - b. archetypes
 - c. observational learning
 - d. the basic goodness in human nature

17. The belief that personality is created from a person's unique way of perceiving and interpreting the world is known as the _____ perspective.
 - a. social learning
 - b. phenomenological
 - c. Gestalt
 - d. cognitive/social

18. According to Carl Rogers, it is important to receive unconditional positive regard in order to develop a(n) _____ that is capable of self-actualization.
 - a. psyche
 - b. personal unconscious
 - c. ego
 - d. self-concept

19. The _____ approach to personality is most likely to analyze self-talk.
 - a. phenomenological
 - b. social/cognitive
 - c. Neo-Freudian
 - d. collective unconscious

20. Rotter's concept of locus of control and Bandura's concept of self-efficacy share the belief that _____ influence(s) behavior.
 - a. reciprocal determinism
 - b. archetypes
 - c. emotions
 - d. expectancies

PRACTICE TEST II

1. The use of handwriting analysis to assess your personality is probably _____.
 - a. unreliable
 - b. invalid
 - c. non-standardized
 - d. all of these options

Study and Review Guide

2. Achievement tests measure your _____.
 - a. potential abilities
 - b. current knowledge and abilities
 - c. your interests and aptitudes
 - d. all of these options

3. This is an illustration of the Fallacy of Positive Instances.
 - a. offering “something for everyone”
 - b. offering information that maintains a positive self-image
 - c. failing to notice when a characteristic or prediction does not confirm expectations
 - d. all of these options

4. Cheerful, honest, friendly, and optimistic are all _____.
 - a. personality traits
 - b. motives
 - c. emotions
 - d. all of these options

5. Which of the following acronyms can help you remember the “Big 5” personality traits?
 - a. OCEAN
 - b. BEACH
 - c. SHORE
 - d. WAVES

6. The main problem with all trait theories is that they _____.
 - a. are unreliable
 - b. cannot explain personality
 - c. are invalid descriptions of personality
 - d. have not been standardized

7. The id, ego, and superego are _____.
 - a. located in the unconscious
 - b. three mental structures in the psyche
 - c. present at birth
 - d. the first three psychosexual stages of development

8. Perfection is a problem that is most associated with the _____.
 - a. id
 - b. ego
 - c. superego
 - d. ego and superego

Study Guide

9. The problem with the excessive use of defense mechanisms is that they _____.
 - a. distort reality
 - b. increase anxiety
 - c. become ineffective
 - d. become fixated

10. The genitals are the primary erogenous zones in which stage(s) of Freud's psychosexual theory of development?
 - a. latency
 - b. phallic
 - c. phallic and genital
 - d. latency, phallic, and genital

11. Basic anxiety is associated with which of the following Neo-Freudians?
 - a. Horney
 - b. Adler
 - c. Jung
 - d. Rogers

12. The good and bad feelings you have about yourself are called your _____.
 - a. self-concept
 - b. self-esteem
 - c. identity
 - d. superiority-inferiority complex

13. A major criticism of humanistic psychology is that most of its concepts and assumptions _____.
 - a. are invalid
 - b. are unreliable
 - c. cannot be tested empirically
 - d. lack a theoretical foundation

14. Self-efficacy is associated with _____.
 - a. Bandura
 - b. Rogers
 - c. Rotter
 - d. Maslow

15. A criticism of the social-cognitive approach is that it overlooks or ignores the contribution of emotion, development, and _____ in understanding personality.
 - a. scientific research
 - b. the role of the unconscious
 - c. motivation
 - d. expectancies

Study and Review Guide

16. Dopamine is involved in the personality trait(s) of _____.
 - a. sensation-seeking
 - b. extroversion
 - c. aggression and altruism
 - d. extroversion and sensation-seeking

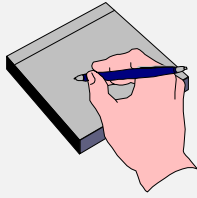
17. Based on heritability studies, 40% to 50% of personality appears to be related to _____.
 - a. the environment
 - b. the family
 - c. family, friends, and the environment
 - d. genetic factors

18. An interactionist approach that explains introversion might suggest that this trait is caused by _____.
 - a. high levels of cortical arousal
 - b. conditioning
 - c. cognitive processes
 - d. all of these options

19. The concept of _____ is essential to all Western theories of personality.
 - a. the unconscious
 - b. self
 - c. behavior
 - d. all of these options

20. In Asia, people are defined in terms of their _____.
 - a. enduring traits
 - b. short-term traits
 - c. social relationship
 - d. submissiveness

Study Guide



ANSWERS

The following answers to active learning exercises, fill-ins, matching exercises, and practice tests 1 and 2 provide immediate feedback on your mastery of the material. Try not to simply memorize the answers. When you are unsure of your “guess” or make an error, be sure to go back to the textbook and carefully review. This will greatly improve your scores on classroom exams and quizzes.

ACTIVE LEARNING EXERCISE II

1. repression; 2. denial; 3. intellectualization; 4. rationalization; 5. projection.

FILL-IN EXERCISES

1. personality, trait; 2. reliability, validity; 3. Minnesota Multiphasic Personality Inventory (MMPI); 4. openness; 5. Psychoanalytic, trait; 6. conscious, preconscious, unconscious; 7. pleasure principle, reality principle; 8. self-concept; 9. reciprocal determinism; 10. interactionist.

MATCHING EXERCISES

a. 9, b. 10, c. 6, d. 2, e. 7, f. 3, g. 5, h. 8, i. 4, j. 1.

<u>PRACTICE TEST I</u>		<u>PRACTICE TEST II</u>	
1. c (p. 465)	11. c (p. 482)	1. d (p. 464)	11. a (p. 485)
2. b (p. 466)	12. c (p. 483)	2. b (p. 467)	12. b (p. 488)
3. c (p. 467)	13. d (p. 484)	3. c (p. 468)	13. c (p. 490)
4. d (p. 467)	14. a (p. 488)	4. a (p. 470)	14. a (p. 491)
5. c (p. 471)	15. c (p. 489)	5. a (p. 472)	15. b (p. 492)
6. c (pp. 470-71)	16. d (p. 489)	6. b (p. 473)	16. d (p. 494)
7. c (p. 472)	17. b (p. 487)	7. b (p. 477)	17. d (p. 494)
8. a (p. 477)	18. d (p. 488)	8. c (p. 478)	18. d (p. 495)
9. a (p. 478)	19. b (p. 491)	9. a (p. 478)	19. b (p. 495)
10. d (p. 482)	20. d (p. 492)	10. c (p. 481)	20. c (p. 496)

Chapter

14

Psychological
Disorders

OUTLINE (Survey & Question)

This outline is intended to help you *survey* the chapter. As you read through the various sections, write down any *questions* or comments that come to mind in the space provided. This is a valuable part of active learning and the SQ4R method. It not only makes your reading time more enjoyable and active, but it also increases retention and understanding of the material.

TOPIC

NOTES

I. STUDYING PSYCHOLOGICAL DISORDERS

- A. Identifying Abnormal Behavior: Four Basic Standards
- B. Gender and Cultural Diversity: A Cultural Look at Disorders
- C. Explaining Abnormality: From Superstition to Science
- D. Classifying Abnormal Behaviors: The Diagnostic and Statistical Manual IV

E. Research Highlight: “Being Insane in Insane Places”

II. ANXIETY DISORDERS

A. Unreasonable Anxiety: Five Major Anxiety Disorders

B. Causes of Anxiety Disorders: Multiple Roots

III. MOOD DISORDERS

A. Understanding Mood Disorders: Major Depressive Disorder and Bipolar Disorder

B. Causes of Mood Disorders: Biological versus Psychosocial Factors

C. Gender and Cultural Diversity: Gender, Culture, and Depression

D. Suicide: Ending Your Own Life

IV. SCHIZOPHRENIA

A. Symptoms of Schizophrenia: Disturbances in Perception, Language, Thought, Emotion, and Behavior

B. Types of Schizophrenia: Recent Methods of Classification

C. Causes of Schizophrenia: Nature and Nurture Theories

- D. Gender and Cultural Diversity: Culture and Schizophrenia

V. OTHER DISORDERS

- A. Dissociative Disorders: When the Personality Splits Apart
- B. Personality Disorders: The Antisocial Personality
- C. Substance-Related Disorders: When Does Drug Use Become Abnormal?
- D. Active Learning: Testing Your Knowledge of Abnormal Behavior



LEARNING OBJECTIVES (Read, Recite & write)

While *reading* the chapter, stop periodically and *recite* (or repeat in your own words) the answers to the following learning objectives. It will also help your retention if you *write* your answer in the space provided. (Page numbers refer to the text Psychology in Action, 5th Ed.)

1. Define the medical student's disease, and describe five common myths regarding mental health and illness (pp. 502-503).
2. Define abnormal behavior, describe the four basic standards for identifying such behavior, and discuss limitations for each standard: statistical infrequency, disability or dysfunction, personal distress, and violation of norms (pp. 503-504).

Study and Review Guide

3. Differentiate between culture-general symptoms and culture-bound disorders. State at least five culture-general symptoms, and explain the use of the Langer index. Describe at least one culture-bound disorder (pp. 504-506).
4. Summarize the historical progression in the definition of abnormality from the demonological to the medical model; describe Szasz's criticism of the medical model of mental illness (pp. 506-507).
5. Describe the development of the Diagnostic and Statistical Manual (DSM), including the DSM-IV's classification system, purpose, and limitations. Differentiate between neurosis, psychosis, and insanity (pp. 507-511).
6. Briefly describe and explain the importance of Rosenhan's classic experiment regarding the consequences of being labeled and treated for mental illness (pp. 511).
7. Describe five major anxiety disorders and their possible causes (pp. 512-517).
8. Describe two major mood disorders and their possible biological and psychosocial causes (pp. 518-520).
9. Describe similarities and differences in depression across cultures and between genders (p. 520).
10. Discuss eight common myths regarding suicide, and describe what steps to take if someone is suicidal (pp. 520-522).
11. Define schizophrenia, and describe its five characteristic symptoms; differentiate between positive and negative symptoms (pp. 523-526).

Study Guide

12. Discuss biological and psychosocial theories that attempt to explain schizophrenia; state the major criticisms for each theory (pp. 526-529).
13. Describe similarities and differences in symptoms of schizophrenia across cultures (pp. 529-530).
14. Identify the common characteristic for all dissociative disorders; differentiate between dissociative amnesia, dissociative fugue, and dissociative identity disorder (pp. 531-532).
15. Describe the essential characteristics for all personality disorders; describe the four hallmark symptoms for an antisocial personality disorder and discuss its biological, environmental, and psychological causes (pp. 532-534).
16. Differentiate between substance abuse and substance dependence; state the most common problems associated with alcohol related disorders and describe current biological and learning theories regarding its causes (pp. 534-535).



KEY TERMS (Review)

The *review* step in the SQ4R method is very important to your performance on quizzes and exams. Upon completion of this chapter, you should be able to define the following terms.

Abnormal Behavior: _____

Antisocial Personality: _____

Anxiety Disorder: _____

Study and Review Guide

Bipolar Disorder: _____

Comorbidity: _____

Delusions: _____

Diagnostic and Statistical Manual of Mental Disorders (DSM-IV): _____

Dissociative Disorder: _____

Dissociative Identity Disorder (DID): _____

Dopamine Hypothesis: _____

Generalized Anxiety Disorder: _____

Hallucinations: _____

Insanity: _____

Study Guide

Learned Helplessness: _____

Major Depressive Disorder: _____

Medical Model: _____

Neurosis: _____

Obsessive-Compulsive Disorder (OCD): _____

Panic Disorder: _____

Personality Disorder: _____

Phobia: _____

Posttraumatic Stress Disorder (PTSD): _____

Psychiatry: _____

Psychosis: _____

Schizophrenia: _____

Substance Related Disorders: _____



ACTIVE LEARNING EXERCISES (Recite)

The *recite* step in the SQ4R method requires you to be an ACTIVE learner. By completing the following exercises, you will test and improve your mastery of the chapter material, which will also improve your performance on quizzes and exams. Answers to some exercises appear at the end of this study guide chapter.

ACTIVE LEARNING EXERCISE I

HOW YOUR THOUGHTS CAN MAKE YOU DEPRESSED

Events have many causes, but if the following situations really happened to you, what do you think would be the most likely cause? Will the cause change in the future? Is the cause unique? Respond to these questions by circling the number that most closely describes how you would feel in this same situation. Answering carefully and truthfully will provide insight into how your thoughts may cause depression.

SITUATION 1

You are introduced to a new person at a party and are left alone to talk. After a few minutes, the person appears bored.

1. Is this outcome caused by you? Or is it something about the other person or the circumstances?

1 2 3 4 5 6 7

Other person or Me
circumstances

2. Will the cause of this outcome also be present in the future?

1 2 3 4 5 6 7
No Yes

3. Is the cause of this outcome unique to this situation, or does it also affect other areas of your life?

1 2 3 4 5 6 7
Affects just this situation Affects all situations in my life

SITUATION 2

You receive an award for a project that is highly praised.

4. Is this outcome caused by you or something about the circumstances?

1 2 3 4 5 6 7
Circumstances Me

5. Will the cause of this outcome also be present in the future?

1 2 3 4 5 6 7
No Yes

6. Is the cause of this outcome unique to this situation, or does it also affect other areas of your life?

1 2 3 4 5 6 7
Affect just this situation Affects all situations in my life

You have just completed a modified version of the *Attributional Style Questionnaire*, which measures people's explanations for the causes of good and bad events. If you have a *depressive explanatory style*, you tend to explain *bad* events--Situation 1--in terms of internal factors ("It's my fault"), a stable cause ("it will always be this way"), and a global cause ("It's this way in many situations"). In contrast, if you have an *optimistic explanatory style*, you tend to make external ("It's someone else's fault"), unstable ("It won't happen again"), and specific ("It's just in this one area") explanations.

When *good* things happen, however, the opposite occurs. People with a depressive explanatory style tend to make external, unstable, specific explanations, while those with an optimistic style tend to make internal, stable, global explanations.

	Depressive Explanatory Style	Optimistic Explanatory Style
Bad Events	Internal, stable, global	External, unstable, specific
Good Events	External, unstable, specific	Internal, stable, global

If you had mostly high scores (5-7) on questions 1, 2, and 3 and low scores (1-3) on questions 4, 5, and 6, you probably have a depressive explanatory style. If the reverse is true (low scores on the first three questions and high scores on the last three), you tend to have an optimistic explanatory style.

What difference does your explanatory style make? Research shows that people who attribute bad outcomes to themselves and good outcomes to external factors are more prone to depression than people who do the opposite (Abramson, Seligman, and Teasdale, 1978; Seligman, 1991, 1994). If you have a bad experience and then blame it on your personal (internal) inadequacies, interpret it as unchangeable (stable), and draw far-reaching (global) conclusions, you are obviously more likely to feel depressed. This self-blaming, pessimistic, and overgeneralizing explanatory style results in a sense of hopelessness (Abramson, Metalsky, and Alloy, 1989; Metalsky et al., 1993).

As expected, the idea that depression can be caused by attributional style has its critics. The problem lies in separating cause from effect (Barnett and Gotlib, 1988). Does a depressive explanatory style cause depression, or does depression cause a depressive explanatory style? Or could another variable, such as neurotransmitters or other biological factors cause both? Evidence suggests that both thought patterns and biology interact and influence depression. Although biological explanations undoubtedly play an important role in major depressive disorders and professional help is needed, you may find that changing your explanatory style can help dispel mild or moderate depression.

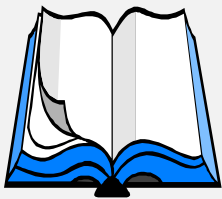
ACTIVE LEARNING EXERCISE II

Distinguishing Fact from Opinion (A Behavioral Skill)

To critically analyze controversial issues, it helps to distinguish between statements of fact and statements of opinion. A fact is a statement that can be proven true. An opinion is a statement that expresses how a person feels about an issue or what someone thinks is true. While it is also important to determine whether the facts are true or false, in this exercise simply mark "O" for opinion and "F" for fact. After you have responded to each of the items, try discussing your answers with friends and classmates.

- _____ 1. The mentally ill are more dangerous than the general public.
- _____ 2. The insanity plea allows criminals back on the street too soon.
- _____ 3. Individuals who are diagnosed as having a "split personality" are also known as schizophrenics.

- _____ 4. People who talk to themselves are probably schizophrenic.
- _____ 5. Everyone has a behavioral disorder of one type or another.
- _____ 6. Delusions are the same as hallucinations.
- _____ 7. Individuals with clean and neat offices are probably obsessive-compulsives.
- _____ 8. Everyone is occasionally depressed and will recover over time
- _____ 9. Posttraumatic stress as a disorder is the invention of psychologists and psychiatrists and probably does not really exist.
- _____ 10. If not properly treated, neurosis can turn into psychosis.



CHAPTER OVERVIEW (Review)

The following CHAPTER OVERVIEW provides a narrative overview of the main topics covered in the chapter. Like the Visual Summary found at the end of each chapter in the text, this narrative summary provides a final opportunity to *review* chapter material.

I. Studying Psychological Disorders *Abnormal behavior refers to patterns of emotion, thought, and action considered pathological for one or more of these reasons: infrequent occurrence, disability or dysfunction, personal distress, or violation of norms.*

The belief that demons cause abnormal behavior was common in ancient times. The medical model, which emphasizes diseases and illness, replaced this demonological model. During the Middle Ages, demonology returned, and exorcisms were used to treat abnormal behavior. Toward the close of the Middle Ages, the medical model returned in the form of hospitals known as asylums.

The medical model and biological theories still dominate modern times. According to critics, this overlooks the importance of psychological factors, such as unconscious conflicts, inappropriate learning, faulty cognitive processes, and negative self-concepts.

The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) categorizes disorders according to major similarities and differences in the way disturbed people behave. DSM-IV classification provides detailed descriptions of symptoms, which in turn allows standardized diagnosis and treatment, and improved communication among professionals and between professionals and patients.

The DSM-IV has been criticized for not paying sufficient attention to cultural factors, for continuing to support the medical model, and for labeling people. Misdiagnosis also occurs, and the label "mentally ill" can lead to social and economic discrimination.

II. Anxiety Disorders *People with anxiety disorders have persistent feelings of threat in facing everyday problems. Phobias are exaggerated fears of specific objects or situations, such as agoraphobia, a fear of being in open spaces. In generalized anxiety disorders, there is a persistent free-floating anxiety. In panic disorder, anxiety is concentrated into brief or lengthy episodes of panic attacks. In obsessive-compulsive disorder, persistent anxiety-arousing thoughts (obsessions) are relieved by ritualistic actions (compulsions) such as hand washing.*

In posttraumatic stress disorder (PTSD), a person who has experienced an overwhelming trauma, such as rape, has recurrent maladaptive emotional reactions, such as exaggerated startle responses, sleep disturbances, and flashbacks.

Three common explanations for anxiety disorders are learning, biology, and cognitive processes. Learning theorists suggest anxiety disorders result from classical and operant conditioning, as well as modeling and imitation; while the biological perspective emphasizes genetic predisposition, brain abnormalities, and biochemistry. The cognitive approach proposes that distorted thinking causes an amplification of ordinary threats.

III. Mood Disorders *Mood disorders are disturbances of affect (emotion) that may include psychotic distortions of reality. In major depressive disorder, individuals experience a long-lasting depressed mood, feelings of worthlessness, and loss of interest in most activities. The feelings are without apparent cause and the individual may lose contact with reality.*

In bipolar disorder, episodes of mania and depression alternate with normal periods. During the manic episode, speech and thinking are rapid, and the person may experience delusions of grandeur and act impulsively.

Biological theories of mood disorders emphasize disruptions in neurotransmitters (especially dopamine and serotonin). There is also evidence of a genetic predisposition for both major depression and bipolar disorder.

Psychological theories of mood disorders emphasize disturbed interpersonal relationships, faulty thinking, poor self-concept, and maladaptive learning. Learned helplessness theory suggests that depression results from repeatedly failing to escape from a source of stress.

Depression involves several culture-general symptoms, such as feelings of sadness and loss of enjoyment in daily activities. Women are more likely than men to suffer depressive symptoms in many countries.

Suicide is a serious problem associated with depression. By becoming involved and showing concern, we can help reduce the risk of suicide.

IV. Schizophrenia *Schizophrenia is a serious psychotic mental disorder that afflicts approximately one out of every 100 people. The five major symptoms are disturbances in perception (impaired filtering and selection, hallucinations); language (word salad, neologisms); thought (impaired logic, delusions); emotion (either exaggerated or blunted emotions); and behavior (social withdrawal, bizarre mannerisms, catatonia, waxy flexibility).*

Schizophrenic symptoms can be divided into a two-type classification system: Distorted or excessive mental activity (e.g., delusions and hallucinations) are classified as positive symptoms, whereas symptoms involving behavioral deficits (e.g., toneless voice, flattened emotions) are classified as negative symptoms.

Biological theories of the causes of schizophrenia propose genetics (people inherit a predisposition), disruptions in neurotransmitters (primarily dopamine), and brain function (such as enlarged ventricles and lower levels of activity in the frontal and temporal lobes). Psychosocial theories of schizophrenia focus on stress and disturbed family communication.

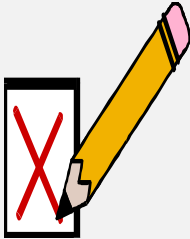
Schizophrenia is the most culturally universal mental disorder in the world. Many symptoms are culturally general (such as delusions), but significant differences also exist across cultures in prevalence, form, onset, and prognosis.

V. Other Disorders *In dissociative disorders, critical elements of personality split apart. This split is manifested in failing to recall or identify past experiences (dissociative amnesia), by leaving home and wandering off (dissociative fugue), or by developing completely separate personalities (dissociative identity disorder [DID] or multiple personality disorder).*

Personality disorders involve inflexible, maladaptive personality traits. The best known type is the antisocial personality, characterized by egocentrism, lack of guilt, impulsivity, and superficial charm. Research suggests this disorder may be related to defects in brain waves, genetic inheritance, or disturbed family relationships.

Substance-related disorders are diagnosed when use of a psychoactive drug interferes with social or occupational functioning and drug tolerance or withdrawal symptoms occur. Learning theory points to maladaptive reinforcement in substance-related disorder combined with a strong genetic inheritance pattern--especially for alcohol abuse.

SELF-TESTS (Review & wRite)



Completing the following SELF-TESTS will provide immediate feedback on how well you have mastered the material. In the *fill-in exercises*, write the appropriate word or words in the blank spaces. The *matching exercise* requires you to match the terms in one column to their correct definitions in the other. For the *multiple-choice questions* in Practice Tests I and II, circle or underline the correct answer. When you are unsure of any answer, be sure to highlight or specially mark the item and then go back to the text for further review. Correct answers are provided at the end of this study guide chapter.

FILL-IN

1. _____ is defined in your text as patterns of emotion, thought, and action considered pathological for one or more of these reasons: statistical infrequency, disability or dysfunction, personal distress, or violation of norms (p. 503).
2. Victims of “windigo psychosis,” a malady that occurs among the Chippewa, Cree, and Montagnais-Naskapi Indians, have a compulsion to _____ (p. 504).
3. In early treatment of abnormal behavior, _____ was used to allow evil spirits to escape; whereas _____ was designed to make the body so uncomfortable it would be uninhabitable by the devil (p. 506).
4. David Rosenhan and his colleagues were admitted to a psychiatric hospital with a diagnosis of _____ because they claimed to hear voices, officially known as _____ (p. 511).
5. _____ is a type of anxiety disorder characterized by intrusive thoughts and urges to perform repetitive, ritualistic behaviors (pp. 514-515).
6. The two main types of mood disorders are _____ and _____ (p. 518).
7. According to Seligman, people who feel they are unable to control or escape from pain and sadness may develop _____ (p. 520).
8. Schizophrenia is also a form of _____, a term describing a general lack of contact with reality (p. 523).
9. The most severe dissociative disorder is _____, previously known as multiple personality disorder, in which at least two separate and distinct personalities exist within the same person (p. 531).

10. The co-occurrence of two or more disorders in the same person at the same time is known as _____ (p. 535).

MATCHING EXERCISES

Column A

- a. Negative Symptoms
- b. Bipolar Disorder
- c. Schizophrenia
- d. DSM-IV
- e. Phobias
- f. OCD
- g. PTSD
- h. Antisocial Personality
- i. Insanity
- j. Neurosis

Column B

- 1. ____ Exaggerated fear of specific objects or situations.
- 2. ____ Legal term implying a diminished responsibility.
- 3. ____ Mania and depression alternate with normal periods.
- 4. ____ Early term describing anxiety type disorders.
- 5. ____ Also known as psychopath or sociopath.
- 6. ____ Persistent thoughts are relieved by ritualistic actions.
- 7. ____ Categorizes mental disorders and their symptoms.
- 8. ____ Serious psychotic disorder affecting 1:100 people.
- 9. ____ Behavioral deficits in schizophrenia.
- 10. ____ Anxiety disorder following a traumatic event.

PRACTICE TEST I

- 1. People may be considered abnormal if their _____ interfere with their ability to function.
 - a. emotions
 - b. thoughts
 - c. behaviors
 - d. any of these options

- 2. According to the _____ model, abnormal behaviors such as depression or schizophrenia are assumed to be mental illnesses.
 - a. psychosocial
 - b. sociocultural
 - c. medical
 - d. demonological

- 3. The DSM-IV provides _____ for mental disorders.
 - a. categorical descriptions
 - b. treatment recommendations
 - c. theoretical causes
 - d. research suggestions

Study and Review Guide

4. This anxiety state cannot be prevented by avoidance.
 - a. phobia
 - b. generalized anxiety disorder
 - c. panic disorder
 - d. obsessive-compulsive disorder

5. This type of anxiety is associated with a generalized anxiety disorder.
 - a. phobia
 - b. free-floating
 - c. panic attack
 - d. nervous breakdown

6. In the Japanese social phobia called TKS, people fear that they will _____.
 - a. evaluate others negatively
 - b. embarrass themselves
 - c. embarrass others
 - d. be embarrassed by others

7. Repetitive, ritualistic behaviors such as handwashing, counting, or putting things in order that are associated with an anxiety state are called _____.
 - a. obsessions
 - b. compulsions
 - c. ruminations
 - d. phobias

8. Rape or assault victims who continue to feel unpleasant emotional reactions would be diagnosed as having a(n) _____.
 - a. obsessive-compulsive disorder
 - b. phobia
 - c. generalized anxiety disorder
 - d. posttraumatic stress disorder

9. Hallucinations and delusions are symptoms of _____.
 - a. mood disorders
 - b. personality disorders
 - c. anxiety disorders
 - d. schizophrenia

Study Guide

10. Antipsychotic drugs can decrease the symptoms of schizophrenia by decreasing the activity of _____.
 - a. dopamine synapses
 - b. serotonin synapses
 - c. the frontal lobes
 - d. the autonomic nervous system

11. Family studies have shown that when it comes to schizophrenia, children are more similar to their _____.
 - a. biological parents than their adoptive parents
 - b. adoptive parents than their biological parents
 - c. friends than their families
 - d. aunts/uncles than their brothers/sisters

12. A major difference between major depressive and bipolar disorder is that only in bipolar disorders do people have _____.
 - a. hallucinations or delusions
 - b. depression
 - c. a biochemical imbalance
 - d. manic episodes

13. This is **NOT** a possible explanation for depression
 - a. imbalances of serotonin or norepinephrine
 - b. genetic predisposition
 - c. lithium deficiency
 - d. learned helplessness

14. For people with seasonal affective disorder, depression occurs during the _____.
 - a. winter
 - b. spring
 - c. summer
 - d. fall

15. Amnesia, fugue, and dissociative identity disorder share this characteristic.
 - a. a separation of experience and memory
 - b. anxiety
 - c. a split personality
 - d. wandering away from home or work

Study and Review Guide

16. Multiple personality disorder is now called _____.
 - a. schizophrenia
 - b. dissociative identity disorder
 - c. amnesiac personality disorder
 - d. none of these options; this diagnosis is no longer considered real

17. Inflexible, maladaptive personality traits that disrupt occupational and social functioning are _____.
 - a. related to a personality disorder
 - b. common in all of us
 - c. found mostly in men
 - d. related to psychopathic deviation

18. Impulsive behavior, egocentrism, lack of a conscience, and _____ are all characteristic of an antisocial personality disorder.
 - a. superficial charm
 - b. lack of social skills
 - c. sympathy for victims
 - d. lack of intelligence

19. If you frequently use a substance that causes you problems at work or in your relationships, and you find it difficult or impossible to reduce or eliminate its use, you have a disorder called _____.
 - a. substance abuse
 - b. substance dependence
 - c. denial
 - d. none of these options; this is considered normal substance use

20. Your coworker is depressed and using alcohol and amphetamines. This is an example of _____.
 - a. suicidal behavior
 - b. comorbidity
 - c. a death wish
 - d. bipolar personality disorder

PRACTICE TEST II

1. The tendency to think you have a psychological disorder after reading this chapter is called _____.
 - a. paranoia
 - b. hypochondriasis
 - c. medical student's disease
 - d. a delusion

Study Guide

2. Shortness of breath, headaches, fullness in the head, and problems with memory: Nishimoto found that all of these symptoms are _____.
 - a. cultural universals
 - b. culture-bound
 - c. signs of mental illness
 - d. symptoms of the medical student's disease

3. This was a historical term for anxiety.
 - a. neurosis
 - b. psychosis
 - c. insanity
 - d. hysteria

4. In the DSM-IV, this category describes a person's psychosocial and environmental stressors.
 - a. Axis I
 - b. Axis II
 - c. Axis IV
 - d. Axis V

5. The most frequently occurring category of mental disorders in the general population is _____.
 - a. psychosis
 - b. personality disorders
 - c. depressive disorders
 - d. anxiety disorders

6. The presence or absence of strong social support is a major predictor of who will develop _____ after a life-threatening event.
 - a. depression
 - b. posttraumatic stress disorder
 - c. panic attacks
 - d. dissociative fugue

7. According to _____ theory, classical conditioning, operant conditioning, modeling, and imitation are the causes of anxiety.
 - a. learning
 - b. psychobiological
 - c. sociobiological
 - d. cognitive-behavioral

Study and Review Guide

8. Distorted thinking that magnifies ordinary threats or failures is the _____ explanation for anxiety disorders.
 - a. social learning
 - b. cognitive
 - c. humanistic
 - d. psychoanalytic

9. Mood disorders are treated by _____, which affect the amount or functioning of norepinephrine and serotonin in the brain.
 - a. antidepressants
 - b. antipsychotics and antidepressants
 - c. lithium
 - d. antidepressants and lithium

10. If your _____ has a mood disorder, you have a 50% chance of developing the disorder as well.
 - a. mother
 - b. father
 - c. sibling
 - d. identical twin

11. Internal, stable, and global attributions for failure or unpleasant circumstances are associated with _____.
 - a. anxiety disorders
 - b. delusional disorders
 - c. depression
 - d. all of these options

12. Socialization towards activity, independence, and the suppression of emotions may explain why fewer men than women are diagnosed with _____.
 - a. depression
 - b. anxiety
 - c. schizophrenia
 - d. antisocial personality disorder

13. NEVER do this if a friend is considering suicide.
 - a. betray their secret
 - b. plant the idea of suicide by talking about it
 - c. explore what he or she has to live for
 - d. leave them alone

Study Guide

14. Auditory hallucinations are most common in _____.
 - a. schizophrenia
 - b. posttraumatic stress disorder
 - c. bipolar disorder
 - d. dissociative identity disorder

15. Self-destructiveness is more common than violence toward others in _____.
 - a. schizophrenia
 - b. depression
 - c. manic episodes
 - d. all of these options

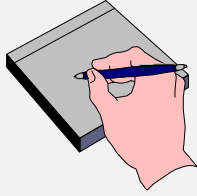
16. A better prognosis is predicted for someone with _____ symptoms of schizophrenia.
 - a. negative
 - b. positive
 - c. deficit
 - d. undifferentiated

17. The frontal lobes appear to be less active in people with _____.
 - a. anxiety
 - b. personality disorders
 - c. schizophrenia
 - d. all of these options

18. The prognosis for people with schizophrenia is better in _____.
 - a. nonindustrialized societies
 - b. families with expressed emotionality
 - c. stressful situations
 - d. none of these options

19. False memories, a history of child abuse, and severe trauma may explain the origins of _____.
 - a. dissociative identity disorder
 - b. schizophrenia
 - c. personality disorders
 - d. phobias

20. Even though emotional deprivation, harsh and inconsistent discipline, and modeling are all highly correlated with antisocial personality disorder, you cannot conclude that these are the causes of this disorder because _____.
 - a. these same behaviors cause schizophrenia in some people
 - b. the correlations are not high enough
 - c. researchers did not look at biological correlations
 - d. correlation does not mean causation



ANSWERS

The following answers to active learning exercises, fill-ins, matching exercises, and practice tests 1 and 2 provide immediate feedback on your mastery of the material. Try not to simply memorize the answers. When you are unsure of your “guess” or make an error, be sure to go back to the textbook and carefully review. This will greatly improve your scores on classroom exams and quizzes.

FILL-IN EXERCISES

1. abnormal behavior; 2. consume human flesh; 3. trephining, exorcism; 4. schizophrenia, auditory hallucinations; 5. obsessive-compulsive disorder (OCD); 6. major depressive disorder, bipolar disorder; 7. learned helplessness; 8. psychosis; 9. dissociative identity disorder (DID); 10. comorbidity.

MATCHING EXERCISES

a. 9, b. 3, c. 8, d. 7, e. 1, f. 6, g. 10, h. 5, i. 2, j. 4

<u>PRACTICE TEST I</u>		<u>PRACTICE TEST II</u>	
1. c (p. 503)	11. a (p. 526)	1. c (p. 502)	11. c (p. 520)
2. c (p. 506)	12. d (p. 519)	2. b (p. 505)	12. a (p. 521)
3. a (p. 508)	13. c (p. 520)	3. a (p. 508)	13. d (pp. 521-22)
4. a (p. 513)	14. a (p. 520)	4. c (p. 509)	14. a (p. 524)
5. b (p. 513)	15. a (p. 531)	5. d (p. 513)	15. d (pp. 518,519,521)
6. c (p. 514)	16. b (p. 531)	6. b (p. 515)	16. b (p. 525)
7. b (p. 514)	17. a (p. 532)	7. a (p. 516)	17. c (p. 527)
8. d (p. 515)	18. a (p. 533)	8. b (p. 517)	18. a (pp. 528-30)
9. d (pp. 524-25)	19. a (p. 534)	9. d (p. 519)	19. a (pp. 531-32)
10.a (p. 527)	20. b (p. 535)	10.d (p. 520)	20. d (p. 21)

Chapter

15

Therapy

OUTLINE (Survey & Question)

This outline is intended to help you *survey* the chapter. As you read through the various sections, write down any *questions* or comments that come to mind in the space provided. This is a valuable part of active learning and the SQ4R method. It not only makes your reading time more enjoyable and active, but it also increases retention and understanding of the material.

TOPIC

NOTES

I. ESSENTIALS OF PSYCHOTHERAPY

II. PSYCHOANALYSIS

A. Goals and Methods of Freudian Psychoanalysis:
Exploring the Unconscious

B. Evaluating Psychoanalysis: Two Major Criticisms

III. COGNITIVE THERAPIES

A. Rational-Emotive Therapy: Changing Irrational
Beliefs

B. Cognitive-Behavior Therapy: Treating Depression

C. Evaluating Cognitive Therapy: What are the Keys to Its Success?

IV. HUMANISTIC THERAPIES

A. Client-Centered Therapy: Carl Rogers' Approach

B. Gestalt Therapy: Becoming "Whole"

C. Evaluating Humanistic Therapy: Does It Help?

V. BEHAVIOR THERAPIES

A. Classical Conditioning Techniques: Changing Associations

B. Operant Conditioning Techniques: Changing the Consequences

C. Modeling: Changing Behavior By Watching Others

D. Evaluating Behavior Therapy: Successes and Problems

VI. GROUP AND FAMILY THERAPIES

A. The Benefits of Group Therapy: "No Man is an Island"

- B. Family Therapies: Healing Interpersonal Relationships

VII. BIOMEDICAL THERAPIES

- A. Drug Therapy: The Pharmacological Revolution
- B. Electroconvulsive Therapy: Promising or Perilous?
- C. Psychosurgery: Altering the Brain
- D. Active Learning: Synthesizing Multiple Forms of Psychotherapy

VIII. ISSUES IN THERAPY

- A. Institutionalization: Treating Chronic and Serious Mental Disorders
- B. Seeking Therapy: Does It Work?
How To Choose?
- E. Research Highlight: A Scientific Look at Therapeutic Touch
- D. Gender and Cultural Diversity: Cultural Variations and the Special Needs of Women in Therapy



LEARNING OBJECTIVES (Read, Recite & wRite)

While *reading* the chapter, stop periodically and *recite* (or repeat in your own words) the answers to the following learning objectives. It will also help your retention if you *write* your answer in the space provided. (Page numbers refer to the text Psychology in Action, 5th Ed.)

1. Define psychotherapy and eclectic therapy, discuss the five goals of psychotherapy, and describe the differences in emphasis for the various approaches to therapy (pp. 542-543).
2. Differentiate between the five types of therapists (psychologists, psychiatrists, psychoanalysts, social workers, and counselors); and describe four common misconceptions about psychotherapy and therapists (pp. 543-544).
3. Define psychoanalysis, and describe its major goals and methods of practice: free association, interpretation, dream analysis, resistance, transference, and interpretation (pp. 545-547).
4. Discuss the two major criticisms of psychoanalysis; and differentiate between psychoanalysis of the past and modern psychodynamic therapy (pp. 547-548).
5. Define cognitive therapy, and describe its emphasis on changing self-talk via cognitive restructuring (p. 550).
6. Compare and contrast Ellis' rational-emotive therapy with Beck's cognitive-behavior therapy (pp. 550-551).
7. Describe the successes reported for cognitive therapies, and discuss the major criticisms of this method (pp. 551-553).
8. Identify a common emphasis in cognitive and humanistic therapies, and state the basic assumptions underlying the humanistic therapies (pp. 553-554).

Study and Review Guide

9. Discuss Rogers' client-centered therapy and the four qualities of client-therapist communication he advocated; elaborate on the similarities and differences between client-centered therapy and Gestalt therapy as practiced by Perls (pp. 554-556).
10. Discuss the research regarding the effectiveness of humanistic therapies (p. 556).
11. Define behavior therapy, and describe its major area of focus. Describe how classical conditioning, operant conditioning, and observational learning are applied to increase adaptive behaviors and decrease maladaptive ones (pp. 557-562).
12. Describe the successes reported for behavioral therapy, and discuss the three major criticisms of this method (p. 562).
13. Discuss three advantages of group therapy, and differentiate between self-help groups and family therapy (pp. 563-565).
14. Define biomedical therapy, and describe the advantages and limitations of drug therapy, electroconvulsive therapy, and psychosurgery (pp. 565-571).
15. Discuss the controversies regarding deinstitutionalization and involuntary commitment; discuss community mental health centers as an alternative to institutionalization (pp. 572-573).
16. Describe the results of controlled research regarding the effectiveness of therapy; and recent research on therapeutic touch; state several strategies for finding an appropriate therapist (pp. 573-574).
17. Describe the six culturally universal characteristics of therapy; describe differences in therapy found in individualist versus collectivist cultures; and discuss the five major areas of concern for women in therapy (pp. 576-577).



KEY TERMS (Review)

The *review* step in the SQ4R method is very important to your performance on quizzes and exams. Upon completion of this chapter, you should be able to define the following terms.

Active Listening: _____

Antianxiety Drugs: _____

Antipsychotic Drugs: _____

Autism: _____

Aversion Therapy: _____

Behavior Therapy: _____

Biomedical Therapy: _____

Catharsis: _____

Client-Centered Therapy: _____

Study and Review Guide

Cognitive-Behavior Therapy: _____

Cognitive Therapy: _____

Cognitive Restructuring: _____

Deinstitutionalization: _____

Drug Therapy: _____

Eclectic Approach: _____

Electroconvulsive Therapy (ECT): _____

Empathy: _____

Extinction: _____

Family Therapy: _____

Study Guide

Free Association: _____

Genuineness: _____

Gestalt Therapy: _____

Group Therapy: _____

Humanistic Therapy: _____

Interpretation: _____

Lobotomy: _____

Modeling Therapy: _____

Psychoanalysis: _____

Psychosurgery: _____

Psychotherapy: _____

Study and Review Guide

Rational-Emotive Therapy (RET): _____

Resistance: _____

Self-help Group: _____

Self-talk: _____

Systematic Desensitization: _____

Tardive Dyskinesia: _____

Transference: _____

Unconditional Positive Regard: _____



ACTIVE LEARNING EXERCISES (Recite)

The *recite* step in the SQ4R method requires you to be an ACTIVE learner. By completing the following exercises, you will test and improve your mastery of the chapter material, which will also improve your performance on quizzes and exams. Answers to some exercises appear at the end of this study guide chapter.

ACTIVE LEARNING EXERCISE I

Confronting Your Own Faulty Reasoning

Albert Ellis' approach to psychotherapy is based on his belief that most human suffering results from illogical thinking. To improve *logical*, critical thinking skills, try the following exercise. Part I discusses two basic tests for sound reasoning, while Part II gives you practice applying these principles to your own irrational beliefs.

Part I

Consider the following syllogism:

- Premise 1:* All dogs are animals.
Premise 2: All animals are blue.
Conclusion: Therefore, all dogs are blue.

Is this sound and logical reasoning? To determine whether an argument is sound and whether the conclusions should be accepted, critical thinkers ask two major questions: "Is the argument valid?" and "Are all premises true?" An argument is considered valid *if* the conclusion logically follows from the premises. The previous syllogism, for example, would be considered valid because *if* all dogs are animals, and all animals are blue, then *logically* all dogs *must* be blue. The second step in evaluating the soundness of arguments does require an examination of the content of argument. For an argument to be sound, each premise must also be true. This is where the previous syllogism falls apart. All dogs are obviously not blue.

The same faulty reasoning that underlies the blue-dog syllogism underlies the irrational beliefs that Ellis' form of cognitive therapy seeks to dispel. See if you can identify the problems with the following misconception.

- Premise 1:* I must have love or approval from all the people I find significant (in order to be happy).
Premise 2: I don't have approval from my mother, whom I consider significant.
Conclusion: Therefore, I am unhappy.

Study and Review Guide

Is this argument valid? If not, why not? Are the premises of this argument true? If not, which ones are false and why?

Part II

Now, think carefully about your own irrational misconceptions (e.g., "I must make everyone happy," "Life must be fair," etc.). In the following spaces, analyze your "self-talk" about one of your misconceptions and try to put it in syllogism form--identify your two basic premises and your conclusion.

Premise 1: _____

Premise 2: _____

Conclusion: _____

Now answer the following questions: Is my argument valid? If not, why not?

Are the premises of my argument true? If not, which one is false and why?

For further practice (and self-insight), try using this same procedure on your other irrational misconceptions. By actively applying logical skills to your own thought processes, you will not only improve your basic critical thinking skills, but, according to Ellis you will also be in a better position to change these self-destructive thought patterns and resultant behaviors.

ACTIVE LEARNING EXERCISE II

Expressing Empathy (An Affective Skill)

According to Dr. Thomas Gordon, people who wish to express empathy must avoid asking questions or giving advice. It is almost always more appropriate to explore the other person's emotional state. He recommends the technique of "active listening," which uses open-ended statements that encourage the expression of feelings. Three basic active listening techniques are:

- a. Repeating what was said as a statement rather than a question.
- b. Slightly rewording (or paraphrasing) the statement.
- c. Stating the feeling you assumed was being expressed.

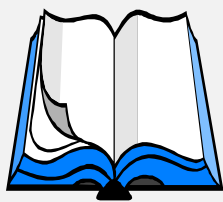
To practice this technique, use either "b" or "c" for each of the following statements:

Sample Statement = "I had the worst day of my life today at work."

Sample Active Listening Response = "Do you mean that everything you did at work today seemed to go wrong?"

1. "I feel like a nobody. No one ever pays attention to me or seems to care about me."

2. "You always seem to hurt my feelings."



CHAPTER OVERVIEW (Review)

The following CHAPTER OVERVIEW provides a narrative overview of the main topics covered in the chapter. Like the Visual Summary found at the end of each chapter in the text, this narrative summary provides a final opportunity to *review* chapter material.

I. Essentials of Psychotherapy *Psychotherapy is a general term for the various approaches to improving psychological functioning and promoting adjustment to life. There are numerous forms of psychotherapy, but they all focus treatment on five basic areas of disturbance---thoughts, emotions, behaviors, interpersonal and life situations, and biomedical.*

II. Psychoanalysis *Sigmund Freud developed the psychoanalytic method of therapy to uncover unconscious conflicts and bring them into conscious awareness. The five major techniques of psychoanalysis are free association, dream analysis, resistance, transference, and interpretation.*

Like psychoanalytic theories of personality, psychoanalysis is the subject of great debate. It is primarily criticized for its limited availability (it is time-consuming, expensive, and suits only a small group of people) and its lack of scientific credibility. Modern psychodynamic therapies overcome some of these limitations.

III. Cognitive Therapies *Cognitive therapy emphasizes the importance of faulty thought processes, beliefs, and negative self-talk in the creation of problem behaviors. Ellis' rational-emotive therapy aims to replace a client's irrational beliefs with rational beliefs and accurate*

perceptions of the world. Beck's cognitive-behavior therapy takes a more active approach with clients by emphasizing changes in both thought processes and behavior.

Evaluations of cognitive therapies find Beck's procedures particularly effective for relieving depression; Ellis has had success with a variety of disorders. Both Beck and Ellis, however, are criticized for ignoring the importance of unconscious processes and the client's history. Some critics also attribute any success with cognitive therapies to the use of behavioral techniques.

IV. Humanistic Therapies Humanistic therapies are based on the premise that problems result when an individual's normal growth potential is blocked. In Rogers' client-centered approach, the therapist offers empathy, unconditional positive regard, genuineness, and active listening as means of facilitating personal growth. Perls' Gestalt therapy emphasizes awareness and personal responsibility to help the client integrate present experiences into a "whole" or gestalt. Humanistic therapies are difficult to evaluate scientifically, and research on specific therapeutic techniques has had mixed results.

V. Behavior Therapies Behavior therapies use learning principles to change maladaptive behaviors. Classical conditioning principles are used to change associations. In systematic desensitization, the client replaces anxiety with relaxation, and in aversion therapy, an aversive stimulus is paired with a maladaptive behavior.

Shaping, reinforcement, punishment, and extinction are behavioral therapy techniques based on operant conditioning principles. In modeling therapy, clients watch and imitate positive role models.

Behavior therapies have been successful with a number of psychological disorders. But they are also criticized for lack of generalizability, the chance of symptom substitution, and the questionable ethics of controlling behavior.

VI. Group and Family Therapies In addition to being less expensive and more available than individual therapy, group therapy has three other advantages: It provides group support, feedback, information, and opportunities for behavior rehearsal. A variation on group therapy is the self-help group (like Alcoholics Anonymous), which is not guided by a professional.

The aim of family therapy is to change maladaptive family interaction patterns. Because a family is a system of interdependent parts, the problems of any one member unavoidably affects all the others.

VII. Biomedical Therapies Biomedical therapies use biological techniques to relieve psychological disorders. Drug therapy is the most common form by far. Antianxiety drugs (Valium, Xanax) are used to treat anxiety disorders; antipsychotic drugs (Thorazine) can relieve the symptoms of schizophrenia, though tardive dyskinesia (motor disturbances) is a serious risk.

Antidepressants (Elavil, Prozac) are used to treat depression, and mood stabilizers (lithium) can stabilize bipolar disorders. While drug therapy has been responsible for major improvements in many disorders, there are also problems with dosage levels, side effects, and patient cooperation.

Electroconvulsive therapy (ECT) is used primarily to relieve serious depression, when medication has not worked. Psychosurgeries, such as lobotomy, have been successful in treating certain disorders, but they are risky and considered a last resort of treatment.

VII. Issues In Therapy People believed to be mentally ill and dangerous to themselves or others can be involuntarily committed to mental hospitals for diagnosis and treatment. Abuses of involuntary commitments and other problems associated with state mental hospitals have led many states to practice deinstitutionalization---discharging as many patients as possible and discouraging admissions. Community services such as Community Mental Health (CMH) centers try to cope with the problems of deinstitutionalization.

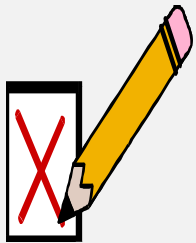
Research on the effectiveness of psychotherapy has found that 40 to 80 percent of those who receive treatment are better off than those who do not receive treatment.

Therapies in all cultures share six culturally universal features: naming a problem, qualities of the therapist, establishing credibility, placing the problems in a familiar framework, applying techniques to bring relief, and a special time and place.

Important cultural differences in therapies also exist. For example, therapies in individualistic cultures emphasize the "self" and control over one's life, while therapies in collectivist cultures emphasize interdependence. Japan's Naikan therapy is a good example of a collectivist culture's therapy.

Therapists must take five considerations into account when treating women clients: higher rate of diagnosis and treatment of mental disorders, stresses of poverty, stresses of multiple roles, stresses of aging, and violence against women.

SELF-TESTS (Review & write)



Completing the following SELF-TESTS will provide immediate feedback on how well you have mastered the material. In the *fill-in exercises*, write the appropriate word or words in the blank spaces. The *matching exercise* requires you to match the terms in one column to their correct definitions in the other. For the *multiple-choice questions* in Practice Tests I and II, circle or underline the correct answer. When you are unsure of any answer, be sure to highlight or specially mark the item and then go back to the text for further review. Correct answers are provided at the end of this study guide chapter.

FILL-IN EXERCISES

1. A system of therapy developed by Sigmund Freud that seeks to bring _____ conflicts into conscious awareness is known as _____ (p. 546).
2. The five major techniques of psychoanalysis are _____, _____, _____, _____, and _____ (pp. 546-547).
3. In modern psychoanalytic therapies known as _____, treatment is briefer, face to face, and more directive (p. 548).

Study and Review Guide

4. _____ therapy was developed by Albert Ellis to eliminate self-defeating beliefs through rational examination (p. 550).
5. Aaron Beck's cognitive-behavior therapy has been successful in the treatment of _____ (p. 552).
6. _____ therapy helps people become creative and unique through affective restructuring (or emotional readjustment) (p. 553).
7. A group of therapies based on learning principles that are used to change maladaptive behaviors is known as _____ (p. 557).
8. _____ is a gradual process of extinguishing a learned fear by associating a hierarchy of fear-evoking stimuli with deep relaxation (p. 558).
9. ECT is used primarily to treat _____ (p. 568).
10. The policy of discharging as many people as possible from state hospitals and discouraging admissions is known as _____ (p. 572).

MATCHING EXERCISES

Column A

- a. Family Therapy
- b. Antipsychotic Drugs
- c. ECT
- d. Gestalt Therapy
- e. Self-Help Group
- f. Carl Rogers
- g. Aversion Therapy
- h. Modeling Therapy
- i. Free Association
- j. Self-Talk

Column B

- 1.____ Internal dialogue when interpreting events.
- 2.____ Alcoholics Anonymous.
- 3.____ Reporting whatever comes to mind without censoring.
- 4.____ Clients watch and imitate positive role models.
- 5.____ Relieve symptoms of schizophrenia.
- 6.____ Client-centered therapy to facilitate personal growth.
- 7.____ Attempts to change maladaptive family interactions.
- 8.____ Emphasizes awareness and personal responsibility.
- 9.____ Treatment for severe depression when medication fails.
- 10.____ Aversive stimulus is paired with maladaptive behavior.

PRACTICE TEST I

1. This was **NOT** one of the methods used to treat mentally ill patients in the 1950s.
 - a. immersion in cold water for hours to induce semi-consciousness
 - b. trephining
 - c. institutionalization
 - d. frontal lobotomy

Study Guide

2. Dr. Baker treats patients with mental disorders. Which of the following is least likely to indicate her doctoral degree?
 - a. Ph.D.
 - b. M.D.
 - c. D.D.S.
 - d. Ed.D.

3. Catharsis is the _____.
 - a. reporting of psychic contents without censorship
 - b. release of tensions and anxieties
 - c. attachment process that occurs between patient and therapist
 - d. therapist's educated explanations for a patient's behavior

4. In psychoanalytic dream interpretation, the actual events of the dream are known as the _____ content.
 - a. manifest
 - b. latent
 - c. subconscious
 - d. transference

5. Free association and dream interpretation are psychoanalytic therapy techniques that are used to _____.
 - a. analyze intrapsychic conflicts
 - b. keep unconscious conflicts out of awareness
 - c. restructure the self-concept
 - d. countercondition behavior

6. In _____, mistaken beliefs or misconceptions are actively disputed.
 - a. client-centered therapy
 - b. psychoanalysis
 - c. rational-emotive therapy
 - d. systematic desensitization

7. According to rational emotive therapy, a consequence such as depression or anxiety occurs as a result of a(n) _____.
 - a. activating experience
 - b. stimulus event
 - c. conditioning experience
 - d. belief

Study and Review Guide

8. A client-centered therapist emphasizes the importance of _____.
 - a. supporting the positive growth of the self-concept
 - b. rewarding appropriate behaviors
 - c. appropriate role models
 - d. creating insight and catharsis

9. Sharing another person's inner experience is known as _____.
 - a. unconditional positive regard
 - b. genuineness
 - c. empathy
 - d. sympathy

10. In a Gestalt awareness exercise, the therapist assists the client in becoming aware of his or her _____.
 - a. past behaviors
 - b. present physiological state and body cues
 - c. future potential
 - d. all of these options

11. _____ pairs relaxation with a graduating hierarchy of anxiety-producing situations to extinguish the anxiety.
 - a. Classical conditioning
 - b. Shaping
 - c. Systematic desensitization
 - d. Maslow's pyramid training

12. Aversion therapy applies the principle of _____ by pairing an unpleasant stimulus with a maladaptive behavior to extinguish the behavior.
 - a. classical conditioning
 - b. operant conditioning
 - c. positive punishment
 - d. negative punishment

13. One of the most frequently used methods of negative punishment is _____.
 - a. time out
 - b. aversion therapy
 - c. electroconvulsive shock treatment
 - d. token economies

14. A family therapist believes that the family's scapegoat _____.
 - a. should be treated first
 - b. is being blamed for deeper family issues
 - c. requires hospitalization
 - d. is the reason for the family's dysfunction

Study Guide

15. This drug is **NOT** used to treat anxiety disorders.
 - a. Valium
 - b. Librium
 - c. Lithium
 - d. Xanax

16. Tardive dyskinesia is thought to be a side effect of treatment with _____ medication.
 - a. mood-altering
 - b. psychoactive
 - c. antianxiety
 - d. antipsychotic

17. Biomedical therapy does **NOT** use _____ to reduce symptoms associated with psychiatric disorders.
 - a. ECT
 - b. EST
 - c. trephining
 - d. lobotomy

18. ECT is now used primarily in the treatment of _____.
 - a. depression
 - b. anxiety
 - c. phobias
 - d. schizophrenia

19. The original form of psychosurgery developed by Egaz Moniz disconnected the _____ lobes from the midbrain structures where emotional experiences are relayed.
 - a. occipital
 - b. parietal
 - c. temporal
 - d. frontal

20. This is **NOT** one of the usual benefits of group therapy.
 - a. support from others with similar problems
 - b. multiple resources
 - c. opportunities for behavioral rehearsal
 - d. group sympathy for a patient complaints

PRACTICE TEST II

1. Which of the following may actually alter brain functioning?
 - a. electroconvulsive therapy
 - b. drug therapy
 - c. psychotherapy
 - d. all of these options

2. Disturbed behaviors are most likely to be the focus in _____.
 - a. cognitive therapy
 - b. biomedical therapy
 - c. psychoanalysis
 - d. behavior therapy

3. Transference is the process of _____.
 - a. changing therapists
 - b. changing therapeutic techniques or strategies
 - c. displacing associations from past relationships onto new relationships
 - d. replacing maladaptive patterns with adaptive ones

4. According to some critics, traditional psychoanalysis is appropriate only for _____ clients.
 - a. young and attractive
 - b. verbal
 - c. intelligent and successful
 - d. YAVIS

5. If you are unhappy because you believe you must be perfect or must get straight A's, Ellis might point out the source of your unhappiness by saying, "You're _____!"
 - a. mustering
 - b. already perfect, and just don't know it yet
 - c. an overachiever
 - d. lying

6. _____ believes selective perception and other distorted thinking patterns cause depression.
 - a. Bandura
 - b. Beck
 - c. Rogers
 - d. Perls

7. Cognitive therapy is effective for treating _____.
 - a. depression
 - b. anxiety
 - c. eating and substance-related disorders
 - d. all of these options

Study Guide

8. The client is responsible for discovering his or her own maladaptive patterns in _____ therapy.
 - a. biomedical
 - b. psychoanalytic
 - c. humanistic
 - d. all of these options

9. A client-centered therapist would not say, "You're right about that" because _____.
 - a. it wouldn't be genuine
 - b. the client is seldom right
 - c. it implies that the therapist is judging the client
 - d. it is not empathic

10. Research shows that combining Rogerian supportiveness with _____ is a very effective form of treatment.
 - a. psychoanalytic transference
 - b. gestalt directness
 - c. drug therapy
 - d. cognitive restructuring

11. Relaxation training is an important component in _____.
 - a. systematic desensitization
 - b. aversion conditioning
 - c. time out training
 - d. a token economy

12. People with mental retardation, delinquent behaviors, and substance abuse disorders have been treated successfully with _____ therapy.
 - a. electroconvulsive shock
 - b. drug
 - c. psychoanalytic
 - d. behavior

13. The main difference between a self-help group and group therapy is that the former _____.
 - a. does not deal with psychological problems
 - b. provides more understanding and support
 - c. does not have a professional leader
 - d. all of these options

Study and Review Guide

14. Patient noncompliance, unwanted side effects, and difficulty in determining appropriate “levels” of treatment are major problems associated with _____.
 - a. all biomedical therapy techniques
 - b. electroconvulsive shock treatment
 - c. drug therapy
 - d. psychosurgery

15. Tardive dyskinesia is associated with _____.
 - a. prolonged use of antipsychotic drugs
 - b. Parkinson’s disease
 - c. Alzheimer’s disease
 - d. too many electroconvulsive shock treatments

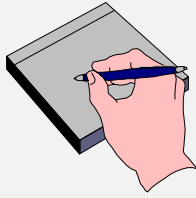
16. The drugs, Clozaril and lithium require _____.
 - a. hospitalization
 - b. close monitoring of dosage levels
 - c. strict patient compliance
 - d. supplementation with B-complex vitamins

17. The most effective treatment for depression is _____.
 - a. ECT
 - b. drug therapy
 - c. psychotherapy
 - d. psychotherapy combined with drug therapy

18. Someone with severe, vegetative depression and suicidal ideation that has not been successfully managed with other treatment methods might require _____.
 - a. a frontal lobotomy
 - b. ECT
 - c. combination drug therapy
 - d. all of these options

19. If a client threatens to rob a bank, the therapist can hospitalize the client for _____.
 - a. 12 to 24 hours
 - b. 24 to 72 hours
 - c. as long as it takes for the client to stop the threats
 - d. none of these options; this is not an indication for involuntary hospitalization

20. A *Consumer Reports* survey confirmed which of these previous research findings?
 - a. most people get better with treatment
 - b. some therapies are better than others
 - c. short-term is better than long-term treatment
 - d. all of these findings



ANSWERS

The following answers to active learning exercises, fill-ins, matching exercises, and practice tests 1 and 2 provide immediate feedback on your mastery of the material. Try not to simply memorize the answers. When you are unsure of your “guess” or make an error, be sure to go back to the textbook and carefully review. This will greatly improve your scores on classroom exams and quizzes.

FILL-IN EXERCISES

1. unconscious, psychoanalysis; 2. free association, dream analysis, resistance, transference, interpretation; 3. psychodynamic; 4. Rational-emotive; 5. depression; 6. Humanistic; 7. behavior therapy; 8. Systematic desensitization; 9. depression; 10. deinstitutionalization.

MATCHING EXERCISES

a. 7, b. 5, c. 9, d. 8, e. 2, f. 6, g. 10, h. 4, i. 3, j. 1

<u>PRACTICE TEST I</u>		<u>PRACTICE TEST II</u>	
1. b (p. 541)	11. c (p. 558)	1. d (p. 542)	11. a (p. 558)
2. c (p. 544)	12. a (p. 559)	2. d (p. 543)	12. d (p. 562)
3. b (p. 546)	13. a (p. 561)	3. c (p. 547)	13. c (p. 563)
4. a (p. 546)	14. b (p. 564)	4. d (p. 548)	14. c (p. 566)
5. a (p. 546)	15. c (p. 566)	5. a (p. 550)	15. a (p. 567)
6. c (pp. 550-51)	16. d (p. 567)	6. b (p. 552)	16. b (pp. 567-68)
7. d (p. 550)	17. c (p. 565)	7. d (p. 552)	17. d (p. 568)
8. a (p. 554)	18. a (p. 568)	8. c (p. 554)	18. b (pp. 568-69)
9. c (p. 554)	19. d (p. 570)	9. c (p. 554)	19. d (p. 572)
10. b (p. 556)	20. d (p. 563)	10. b (p. 556)	20. a (pp. 573-74)

Chapter

16

Social
Psychology

OUTLINE (Survey & Question)

This outline is intended to help you *survey* the chapter. As you read through the various sections, write down any *questions* or comments that come to mind in the space provided. This is a valuable part of active learning and the SQ4R method. It not only makes your reading time more enjoyable and active, but it also increases retention and understanding of the material.

TOPIC

NOTES

I. OUR THOUGHTS ABOUT OTHERS

- A. Attribution: Explaining Other's Behavior

- B. Attitudes: Our Learned Predisposition Toward Others

II. OUR FEELINGS ABOUT OTHERS

- A. Prejudice and Discrimination: It's the Feeling That Counts

- B. Interpersonal Attraction: Liking and Loving Others

Study Guide

- C. Gender and Cultural Diversity: Physical Attractiveness Across Cultures

III. OUR ACTIONS TOWARD OTHERS

- A. Social Influence: Conformity and Obedience
- B. Active Learning: Would You Have Obeyed Milgram's Experimenters?
- C. Group Processes: Membership and Decision-Making
- D. Aggression: Explaining and Controlling It
- E. Research Highlight: Juvenile Aggression and Mass Murder at Columbine High
- F. Altruism: Why We Help (and Don't Help) Others



LEARNING OBJECTIVES (Read, Recite & wRite)

While *reading* the chapter, stop periodically and *recite* (or repeat in your own words) the answers to the following learning objectives. It will also help your retention if you *write* your answer in the space provided. (Page numbers refer to the text Psychology in Action, 5th Ed.)

1. Define social psychology, and describe the results of research on several common sense statements regarding social interactions; briefly describe Milgram's classic obedience study (pp. 583-585).

Study and Review Guide

2. Define attribution, and explain how choosing between dispositional and situational attributions results in two critical misjudgments: the fundamental attribution error and the self-serving bias (pp. 585-587).
3. Define attitude, and describe its three basic components (pp. 587-588).
4. Describe cognitive dissonance theory, the impact of dissonance on attitudes and behavior, and how culture impacts cognitive dissonance (pp. 588-590).
5. Using the three components of an attitude, differentiate between a stereotype, prejudice, and discrimination. Describe the four major sources of prejudice and discrimination: learning, cognitive processes, economic and political competition, and displaced aggression (pp. 591-593).
6. Explain how cooperation, superordinate goals, and increased contact can reduce prejudice and discrimination (pp. 593-594).
7. Describe the three key factors in interpersonal attraction: physical attractiveness, proximity, and similarity. Discuss cross-cultural and historical similarities and differences in physical attractiveness (pp. 594-597).
8. Describe the three components that distinguish liking from loving in Rubin's research: caring, attachment, and intimacy (p. 597).
9. Compare and contrast romantic and companionate love; discuss problems associated with romantic love (pp. 597-600).

Study Guide

10. Define conformity, and explain the three factors that contribute to this behavior: normative social influence, informational social influence, and the role of reference groups (pp. 600-602).
11. Define obedience, and describe how authority, responsibility, graduations in requests, and disobedient models affect this behavior (pp. 603-604).
12. Define a group; define roles; describe the effect of roles on the behavior of “prisoners” and “guards” in Zimbardo’s classic prison study (pp. 605-606).
13. Discuss how group polarization and groupthink affect group decision making (pp. 606-608).
14. Define aggression, and explain the factors that contribute to its expression: instinct, genes, the brain and nervous system, substance abuse and other mental disorders, hormones and neurotransmitters, frustration, and cultural learning (pp. 609-610).
15. Describe three approaches to controlling or eliminating aggression. Identify five misconceptions and controversies regarding juvenile aggression (pp. 610-612).
16. Define altruism, and describe its evolutionary benefit. Compare and contrast the egoistic model and the empathy-altruism hypothesis explanations of this behavior (pp. 612-613).
17. Describe Latane and Darley’s decision-making model for helping behavior, and discuss how it can be used to increase the likelihood of helping (pp. 613-614).



KEY TERMS (Review)

The *review* step in the SQ4R method is very important to your performance on quizzes and exams. Upon completion of this chapter, you should be able to define the following terms.

Aggression: _____

Altruism: _____

Attitude: _____

Attribution: _____

Cognitive Dissonance Theory: _____

Companionate Love: _____

Conformity: _____

Diffusion of Responsibility: _____

Discrimination: _____

Study Guide

Egoistic Model: _____

Empathy-Altruism Hypothesis: _____

Foot-in-the-Door Technique: _____

Frustration-Aggression Hypothesis: _____

Fundamental Attribution Error: _____

Group: _____

Group Polarization: _____

Groupthink: _____

Informational Social Influence: _____

Ingroup Favoritism: _____

Study and Review Guide

Interpersonal Attraction: _____

Need Compatibility: _____

Need Complementarity: _____

Norm: _____

Normative Social Influence: _____

Obedience: _____

Outgroup Homogeneity Effect: _____

Personal Space: _____

Physical Attractiveness: _____

Prejudice: _____

Proximity: _____

Study Guide

Reference Groups: _____

Role: _____

Romantic Love: _____

Saliency Bias: _____

Self-Serving Bias: _____

Similarity: _____

Social Psychology: _____

Stereotype: _____

Superordinate Goal: _____



ACTIVE LEARNING EXERCISES (Recite)

The *recite* step in the SQ4R method requires you to be an ACTIVE learner. By completing the following exercises, you will test and improve your mastery of the chapter material, which will also improve your performance on quizzes and exams. Answers to some exercises appear at the end of this study guide chapter.

ACTIVE LEARNING EXERCISE I

In the space next to each issue, place a number (1 to 5) in the first space that indicates your CURRENT attitude, and then enter a number (1 to 5) in the space to the right that indicates your PAST attitude (five to ten years ago).

- 1 = Strongly support
- 2 = Mildly support
- 3 = Neutral
- 4 = Mildly oppose
- 5 = Strongly oppose

	CURRENT	PAST
Drinking and driving	_____	_____
Gun control	_____	_____
Abortion	_____	_____
Smoking in public places	_____	_____
Divorce	_____	_____

1. Circle the top two issues you scored “highest” (either a 1 or 5). Briefly state your attitudes toward each of these issues. How did these attitudes develop? Through direct experience, indirect observation, or what? Can you remember important experiences or significant individuals that influenced these attitudes? Try to identify the three components of each of your three attitudes (cognitive, affective, and behavioral).

Study Guide

2. Now compare your CURRENT attitudes to those of your PAST. Which attitudes were the most subject to change? Why? On what issues were you most resistant to change? How would you explain this?

3. Cognitive dissonance theory asserts that "changing behavior changes attitudes." Using this theory, how would you design a program to change an undesirable attitude (in yourself and others)?

ACTIVE LEARNING EXERCISE II

Applying Knowledge to New Situations (A Behavioral Skill)

A critical thinker is able to take existing information and apply that knowledge to new or future situations. To increase your awareness of various forms of prejudice on your college campus, ask a member of the other sex to be your partner in the following exercise:

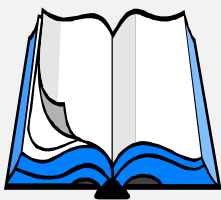
Visit one set of both male and female bathrooms in three separate buildings on your campus (e.g., the art department, business department, and psychology department). Record your observations below:

1. Did you notice any graffiti directed at certain minority groups?

2. Was there a difference between the male and female prejudices (as expressed by the graffiti)?

3. Did you notice a difference between the three buildings in their "graffiti prejudice?"

4. Did you gain new insights into the causes or and treatment of prejudice?



CHAPTER OVERVIEW (Review)

The following CHAPTER OVERVIEW provides a narrative overview of the main topics covered in the chapter. Like the Visual Summary found at the end of each chapter in the text, this narrative summary provides a final opportunity to *review* chapter material.

I. Attribution and Attitudes We explain people's behavior (make attributions) by determining whether their actions resulted from internal factors (their own traits and motives) or external factors (the situation).

Attribution is subject to several forms of error and bias. The fundamental attribution error is the tendency to overestimate internal, personality influences when judging the behavior of others. When we explain our own behavior, however, we tend to attribute positive outcomes to internal factors and negative outcomes to external causes (the self-serving bias).

Study Guide

Attitudes are learned predispositions toward a particular object. Three components of all attitudes are the cognitive responses (thoughts and beliefs), affective responses (feelings), and behavioral tendencies (predispositions to actions).

We sometimes change our attitudes because of cognitive dissonance, which is a state of tension or anxiety we feel when two or more attitudes contradict each other or when our attitudes do not match our behaviors. This mismatch and resulting tension motivate us to change our attitude to restore balance.

II. Prejudice and Discrimination, Interpersonal Attraction *Prejudice is a generally negative attitude directed toward specific people solely because of their membership in a specific group. It contains all three components of attitudes (cognitive, affective, and behavioral).*

Discrimination is not the same as prejudice. It refers to the actual negative behavior directed at members of a group. People do not always act on their prejudices.

The four major sources of prejudice are learning (classical and operant conditioning and social learning), cognitive processes (categorization), economic and political competition, and displaced aggression (scapegoating). Cooperation, superordinate goals, and increased contact are three major methods for reducing prejudice and discrimination.

Physical attractiveness is very important to initial attraction. Physically attractive people are often perceived as more intelligent, sociable, and interesting than less attractive people. Standards for physical attractiveness vary across cultures and historically. Physical attractiveness is generally more important to men than to women.

Physical proximity increases one's attractiveness. If you live near someone or work alongside someone, you are more likely to like that person. Although people commonly believe that "opposites attract," research shows that similarity is a much more important factor in attraction.

Love can be defined in terms of caring, attachment, and intimacy. Romantic love is highly valued in our society, but because it is based on mystery and fantasy, it is hard to sustain. Companionate love relies on mutual trust, respect, and friendship and seems to grow stronger with time.

III. Social Influence *The process of social influence teaches important cultural values and behaviors that are essential to successful social living. Two of the most important forms of social influence are conformity and obedience.*

Conformity refers to changes in behavior in response to real or imagined pressure from others. People conform for approval and acceptance (normative social influence), out of a need for more information (informational social influence), and to match the behavior of those they admire and feel similar to (their reference group). People also conform because it is often adaptive to do so.

Obedience involves giving in to a command from others. Milgram's experiment showed that a surprisingly large number of people will obey orders even when another human being is physically threatened. There are at least four factors that either increase or decrease obedience: the power of authority, foot-in-the-door technique, assignment of responsibility, and disobedient models.

IV. Group Processes *Groups differ from mere collections of people because group members share a mutually recognized relationship with one another. Groups affect us through the roles we play. The importance of roles in determining and controlling behavior was dramatically demonstrated in Zimbardo's Stanford Prison Study.*

Groups are often trusted with decisions because we believe they will make more "middle of the road" decisions than individuals. Research shows, however, that if most group members initially tend toward an extreme idea, the entire group will polarize in that direction because the other "Like-minded" members reinforce the dominant tendency.

Groupthink is a dangerous type of thinking that occurs when a group's desire for agreement overrules its desire to critically evaluate information.

V. Aggression and Altruism *Aggression is any deliberate attempt to harm another living being who is motivated to avoid such treatment. In looking for explanations for aggression, some researchers have focused on inborn instinctual factors, whereas others have done research on genes, the brain, hormones, and neurotransmitters. Still other researchers have studied frustration and social learning.*

Releasing aggressive feelings through violent acts or watching violence is not an effective way to reduce aggression. Introducing incompatible responses (such as humor) and teaching social and communication skills is more efficient.

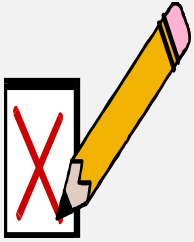
Altruism refers to actions designed to help others with no obvious benefit to oneself. Evolutionary theorists believe altruism is innate and has survival value.

Psychological explanations for altruism emphasize the egoistic model, which suggests that helping is motivated by anticipated gain, or the empathy-altruism hypothesis, which proposes that helping can also be activated when the helper feels empathy for the victim.

Whether or not someone helps depends on a series of interconnected events, starting with noticing the problem and ending with a decision to help. Altruism is also inhibited by the fact that many emergencies are ambiguous and the potential respondent is unsure of what to do. Inhibition also comes from not taking personal responsibility and assuming someone else will respond (the diffusion of responsibility phenomenon).

To increase the chances of altruism, we should increase the rewards and decrease the costs. We can also reduce ambiguity by giving clear directions to those who may be watching.

SELF-TESTS (Review & write)



Completing the following SELF-TESTS will provide immediate feedback on how well you have mastered the material. In the *fill-in exercises*, write the appropriate word or words in the blank spaces. The *matching exercise* requires you to match the terms in one column to their correct definitions in the other. For the *multiple-choice questions* in Practice Tests I and II, circle or underline the correct answer. When you are unsure of any answer, be sure to highlight or specially mark the item and then go back to the text for further review. Correct answers are provided at the end of this study guide chapter.

FILL-IN EXERCISES

1. The principles people follow in making judgments about the causes of events, others' behavior, and their own behavior is known as _____ (p. 585).
2. When judging the causes of others' behavior, we tend to overestimate personality factors and underestimate social or situational factors, a bias known as the _____; however, when judging our own behavior we take credit for successes and externalize failures, known as the _____ (p. 586).
3. There are three major components to all attitudes: the _____, _____, and _____ (p. 588).
4. According to _____ theory, a perceived discrepancy between an attitude and a behavior or between an attitude and new information leads to tension, which then encourages attitude change (p. 588).
5. A generally negative attitude directed toward others because of their membership in a specific group is known as _____ (p. 591).
6. Stereotyping represents the _____ component of prejudice, while discrimination is the _____ component (p. 591).
7. The three key factors in attraction are _____, _____, and _____ (p. 594).
8. A type of social influence where individuals change their behavior as a result of real or imagined group pressure is known as _____; whereas going along with a direct command from others is known as _____ (pp. 601, 603)

9. _____ refers to the tendency of groups to make decisions that are either riskier or more cautious than decisions made by individuals; whereas _____ refers to faulty decision making resulting from the group's strong need for agreement that overrules its desire for critical evaluation (pp. 606-607).
10. Evidence suggests that bystanders failed to intervene in the Kitty Genovese murder because there was _____ (p. 614).

MATCHING EXERCISES

Column A

Column B

- | | |
|-------------------------------|---|
| a. Attitude | 1.____ Helping is motivated by anticipated gain. |
| b. Self-Serving Bias | 2.____ Increases attraction due to mere exposure effect. |
| c. Need Complementarity | 3.____ Those we admire and feel similar to. |
| d. Normative Social Influence | 4.____ Attraction to others with opposite traits. |
| e. Egoistic Model | 5.____ Attraction to others based on similarity. |
| f. Romantic Love | 6.____ Conforming out of a need for approval and acceptance. |
| g. Proximity | 7.____ Based on mutual trust, respect, and friendship. |
| h. Companionate Love | 8.____ Based on mystery and fantasy. |
| i. Reference Group | 9.____ Learned predispositions toward an object. |
| j. Need Compatibility | 10.____ Taking credit for successes and externalizing failures. |

PRACTICE TEST I

1. This is **NOT** studied by social psychologists.
- how others influence an individual's thoughts
 - how groups interact with other groups
 - how a person's feelings are affected by others
 - how an individual acts in the presence of others
2. Attribution _____.
- explains how people use cognitive structures for exploring the world and explaining human behavior
 - describes the principles we use in explaining what caused a behavior
 - is usually unrelated to social perceptions
 - describes our predisposition toward others or things

Study Guide

3. People engage in the fundamental attribution error because _____.
 - a. it is easier to blame people than "things"
 - b. people seem more conspicuously involved in the causes of things
 - c. situations seem more difficult to control or change compared to people
 - d. thoughts are more salient than behaviors

4. Which statement does **NOT** illustrate a component of an attitude toward marijuana?
 - a. the belief that marijuana is unsafe
 - b. anxiety regarding the dangers of marijuana
 - c. a predisposition to vote against the legalization of marijuana
 - d. hallucinating while under the influence

5. Cognitive dissonance provokes a change in attitude due to _____.
 - a. rational discourse between the id, ego, and superego
 - b. irrational discourse between people with opposite attitudes
 - c. emotional thinking and reasoning
 - d. psychological tension produced by discrepant attitudes

6. Cognitive dissonance is most prevalent in _____ cultures.
 - a. all
 - b. collectivist
 - c. interdependent
 - d. individualistic

7. A(n) _____ is the learned predisposition to respond consistently in a positive or negative way to someone, some thing, or some situation.
 - a. attitude
 - b. attribute
 - c. cognition
 - d. bias

8. Prejudice is a _____ directed toward others based on their group membership.
 - a. negative behavior
 - b. generally negative attitude
 - c. stereotype
 - d. all of these options

9. _____ is the cognitive component of prejudice.
 - a. Harassment
 - b. A stereotype
 - c. Discrimination
 - d. Ethnocentrism

Study and Review Guide

10. Which of the following is an example of the outgroup homogeneity effect?
 - a. "You don't belong here."
 - b. "We are all alike."
 - c. "You can't tell those people apart."
 - d. all of these options

11. Your text defines aggression as _____.
 - a. any behavior intended to harm someone
 - b. physical or verbal force against others
 - c. physical force against yourself or others
 - d. purposeful and accidental force of any kind

12. Research has consistently shown that physical attractiveness _____.
 - a. has little or no effect on interpersonal attraction
 - b. is one of the most important factors in liking
 - c. is associated with socioeconomic status
 - d. is the same for all cultures

13. An intense feeling of attraction to another person characterized by high passion, obsessive thinking, and emotional fluctuation defines _____.
 - a. the arousal phase
 - b. companionate love
 - c. romantic love
 - d. the sexual response cycle

14. Conforming to the typical behaviors of society out of a need for approval and acceptance is known as _____.
 - a. normative social influence
 - b. informational social influence
 - c. obedience
 - d. reference group adherence

15. Authority is most associated with which form of social influence?
 - a. informational
 - b. normative
 - c. obedience
 - d. reference group

16. In Zimbardo's prison experiment, the majority of the subjects with the role of prisoner became _____.
 - a. combative
 - b. defiant
 - c. passive
 - d. manic depressive

Study Guide

17. A group is strongly cohesive and its members have a shared desire for agreement; the members should be alert to the dangers of this in their decision making.
- group polarization
 - groupthink
 - brainstorming
 - the "bandwagon" effect
18. The tendency of a group to shift towards its initial dominant behavior or attitude is called _____.
- the risky shift
 - the conservative movement
 - groupthink
 - group polarization
19. Altruism refers to actions designed to help others when _____.
- there is no obvious benefit to oneself
 - there is a benefit to the altruistic person
 - they have previously helped you
 - they are in a position to help you in the future
20. Based on Latane and Darley's theory, Kitty Genovese might have survived if she had been attacked _____.
- in the midwest instead of New York
 - indoors instead of outdoors
 - in the presence of only one neighbor who knew no one else was around
 - during daylight hours instead of at night

PRACTICE TEST II

1. _____ percent of the people in Milgram's study followed orders to hurt a fellow participant.
- 15
 - 25
 - 65
 - 95
2. Internal dispositions and external situations are the two basic types of _____.
- cognitions
 - propositions
 - attributions
 - attitudes

Study and Review Guide

3. One reason you look back at the ground when you trip is to signal others that there might be a(n) _____ for why you tripped.
 - a. situational attribution
 - b. external disposition
 - c. cognitive proposition
 - d. internal attitude

4. “All old people are slow drivers” is an example of _____.
 - a. the fundamental attribution error
 - b. prejudice
 - c. ethnocentrism
 - d. discrimination

5. After demeaning a member of another ethnic group, Walter experienced a brief rise in his own self-esteem. This is one way children learn _____.
 - a. the self-serving bias
 - b. prejudice
 - c. ethnocentrism
 - d. external attributions

6. People with more political power are more likely to be prejudiced because they _____.
 - a. fear retaliation
 - b. need to justify their dominance
 - c. enjoy being looked up to
 - d. have nothing to lose

7. Similarity is the most important factor in _____ a relationship.
 - a. forming
 - b. appreciating
 - c. ending
 - d. maintaining

8. The reason _____ increases liking is that familiarity is less threatening than novelty.
 - a. mere exposure
 - b. physical attractiveness
 - c. need complementarity
 - d. need compatibility

9. According to _____, caring, attachment, and intimacy are important elements in loving.
 - a. Sternberg
 - b. Milgram
 - c. Zimbardo
 - d. Rubin

Study Guide

10. Rubin found that _____ was associated with admiration, respect, and favorable evaluation.
 - a. liking
 - b. loving
 - c. caring
 - d. limerance

11. Illusions are one of the foundations of _____ love.
 - a. companionate
 - b. romantic
 - c. fatuous
 - d. empty

12. What did Benjamin Franklin have to say about vision and love?
 - a. love lasts longest when your eyes are wide open
 - b. don't look before you leap
 - c. a glance is worth a thousand words
 - d. wide-eyed at first, then half closed

13. Asch is best known for his study on _____.
 - a. compliance
 - b. obedience
 - c. conformity
 - d. persuasion

14. Normative social influence, informational social influence, and reference groups are explanations for _____.
 - a. compliance
 - b. the foot-in-the-door strategy
 - c. obedience
 - d. conformity

15. Legitimate authority, gradual increases in demands, and _____ were several of the reasons participants in Milgram's study obeyed the researchers.
 - a. letting others assume responsible
 - b. the fundamental attribution error
 - c. the self-serving bias
 - d. lack of empathy

Study and Review Guide

16. Roles are based on _____.
 - a. social expectations
 - b. inborn dispositions
 - c. acquired dispositions
 - d. personal expectations

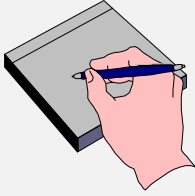
17. The classic prison study that determined the power of roles in affecting people's behavior was conducted by _____.
 - a. Milgram
 - b. Zimbardo
 - c. Bandura
 - d. Asch

18. Appointing a devil's advocate in a cohesive group would _____.
 - a. improve the group's decision-making abilities
 - b. hinder the group's decision-making efforts
 - c. have no effect on group decision-making
 - d. lead to chaos, resentment, and dissolution of the group

19. Violence in children _____.
 - a. is inevitable
 - b. can be predicted by their levels of testosterone
 - c. can be predicted by the amount of violent television they watch
 - d. is totally unpredictable

20. If you were being mugged on a busy sidewalk, which of the following would be most likely to get you the help you need?
 - a. fighting with the mugger
 - b. yelling, "Help, help!"
 - c. crying forlornly and looking helpless
 - d. pointing to a specific person and asking them to call the police

Study Guide



ANSWERS

The following answers to active learning exercises, fill-ins, matching exercises, and practice tests 1 and 2 provide immediate feedback on your mastery of the material. Try not to simply memorize the answers. When you are unsure of your “guess” or make an error, be sure to go back to the textbook and carefully review. This will greatly improve your scores on classroom exams and quizzes.

FILL-IN EXERCISES

1. attribution; 2. fundamental attribution error, self-serving bias; 3. cognitive, affective, behavioral; 4. cognitive dissonance; 5. prejudice; 6. cognitive, behavioral; 7. physical attractiveness, proximity, similarity; 8. conformity, obedience; 9. group polarization, groupthink; 10. a diffusion of responsibility.

MATCHING EXERCISES

a. 9, b. 10, c. 4, d. 6, e. 1, f. 8, g. 2, h. 7, i. 3, j. 5.

PRACTICE TEST I

- | | |
|----------------|----------------|
| 1. b (p. 585) | 11. a (p. 609) |
| 2. b (p. 585) | 12. b (p. 594) |
| 3. a (p. 586) | 13. c (p. 597) |
| 4. d (p. 588) | 14. a (p. 601) |
| 5. d (p. 588) | 15. c (p. 603) |
| 6. d (p. 588) | 16. c (p. 606) |
| 7. a (p. 587) | 17. b (p. 607) |
| 8. b (p. 591) | 18. d (p. 603) |
| 9. b (p. 591) | 19. a (p. 612) |
| 10. c (p. 592) | 20. c (p. 614) |

PRACTICE TEST II

- | | |
|----------------|--------------------|
| 1. c (p. 584) | 11. b (p. 599) |
| 2. c (p. 586) | 12. d (p. 599) |
| 3. a (p. 586) | 13. c (p. 601) |
| 4. b (p. 592) | 14. d (p. 601) |
| 5. b (p. 592) | 15. a (p. 603) |
| 6. b (p. 592) | 16. a (p. 605) |
| 7. d (p. 596) | 17. b (p. 605) |
| 8. a (p. 595) | 18. a (pp. 607-08) |
| 9. d (p. 597) | 19. c (p. 610) |
| 10. a (p. 597) | 20. d (p. 614) |

Chapter

17

Industrial/
Organizational
Psychology

OUTLINE (Survey & Question)

This outline is intended to help you *survey* the chapter. As you read through the various sections, write down any *questions* or comments that come to mind in the space provided. This is a valuable part of active learning and the SQ4R method. It not only makes your reading time more enjoyable and active, but it also increases retention and understanding of the material.

TOPIC

NOTES

I. THE DEVELOPMENT OF I/O PSYCHOLOGY

- A. The Beginnings: Applying Psychology to Sales and Worker Efficiency
- B. Modern Times: Expanding the Role of I/O Psychology

II. HUMAN FACTORS PSYCHOLOGY

- A. The Human-Machine System: How to Get People and Machines to Mix
- B. Displays: How the Machine Talks to You

C. Controls: How You Talk to the Machine

III. PERSONNEL PSYCHOLOGY

- A. Recruitment and Selection: Finding the Right Person for the Right Job
- B. Employee Training: Objectives and Methods
- C. Gender and Cultural Diversity: What Happens to Business when Cultures Clash?
- D. Evaluating Workers: Measuring Job Performance
- E. Sexual Harassment: An Abuse of Power

IV. ORGANIZATIONAL PSYCHOLOGY

- A. Managerial Style: Theory X and Theory Y
- B. Worker Motivation: Goal-Setting, Equity, and Expectancy
- C. Job Satisfaction: What are the Important Factors?
- D. Research Highlight: Job Satisfaction and Psychotherapy
- E. Active Learning: Are You in the Right Job?



LEARNING OBJECTIVES (Read, Recite & wRite)

While *reading* the chapter, stop periodically and *recite* (or repeat in your own words) the answers to the following learning objectives. It will also help your retention if you *write* your answer in the space provided. (Page numbers refer to the text Psychology in Action, 5th Ed.)

1. Define industrial/organizational (I/O) psychology, and identify its three areas of focus (p. 620).
2. Summarize the historical origins of I/O psychology in the workplace, and the contributions of Scott, Taylor, and Munsterberg (p. 621).
3. Describe the importance of the following world events in the progression of I/O psychology: World War I, the General Electric Hawthorne study, World War II, and the Civil Rights movement (pp. 622-625).
4. Define human factors psychology; describe the major components of a human-machine system, and provide an example of such a system (pp. 626-628).
5. Describe how a machine “talks” to people via displays, and how people “talk” to machines via controls; explain how human senses and motor responses are related to the human-machine system (pp. 628-630).
6. Define personnel psychology, and identify its three areas of focus (p. 631).
7. Describe the process of recruitment and selection, including job analysis and the selection of a field of candidates (p. 631).

Study Guide

8. Differentiate between structured and unstructured interviews, and describe the kinds of information an employer wants to know. Describe the advantages of interviews to applicants and interviewers, and list the characteristics of a successful candidate (pp. 631-632).
9. Define organizational culture, and describe how an employee orientation can provide clues to this culture; differentiate between skills training, general training, and diversity training (p. 633).
10. Describe the effects of cultural clashes in business, and discuss three ways to minimize such misunderstandings (pp. 633-635).
11. Define performance evaluations, and describe how they are used and what makes them most effective; differentiate between objective and subjective evaluation measures, including the benefits and limitations of each, and the halo effect (pp. 635-637).
12. Define sexual harassment, and discuss common misconceptions about its occurrence; describe five steps an organization can take to limit legal liability for harassment, and four steps an employee (or student) can take to prevent or deal with sexual harassment (pp. 637-639).
13. Define organizational psychology, and identify its three areas of focus (p. 639).
14. Compare and contrast Theory X and Theory Y with respect to managerial styles, including a description of participative decision making and quality circles (pp. 640-641).
15. Describe three worker motivation theories: goal setting, equity, and expectancy (pp. 641-643).

16. Discuss the benefits to management and employees of worker job satisfaction; discuss the factors that contribute to job satisfaction (pp. 643-644).
17. Describe the research findings regarding job satisfaction for psychotherapists (p. 645).



KEY TERMS (Review)

The *review* step in the SQ4R method is very important to your performance on quizzes and exams. Upon completion of this chapter, you should be able to define the following terms.

Controls: _____

Displays: _____

Equity Theory: _____

Expectancy Theory: _____

Goal-Setting Theory: _____

Halo Effect: _____

Hawthorne Effect: _____

Study Guide

Human Factors Psychology: _____

Human-Machine System: _____

Industrial/Organizational (I/O) Psychology: _____

Job Analysis: _____

Organizational Culture: _____

Organizational Psychology: _____

Participative Decision Making: _____

Performance Evaluation: _____

Personality-Job Fit Theory: _____

Personnel Psychology: _____

Quality Circles: _____

Sexual Harassment: _____

Theory X: _____

Theory Y: _____



ACTIVE LEARNING EXERCISES (Recite)

The *recite* step in the SQ4R method requires you to be an ACTIVE learner. By completing the following exercises, you will test and improve your mastery of the chapter material, which will also improve your performance on quizzes and exams. Answers to some exercises appear at the end of this study guide chapter.

ACTIVE LEARNING EXERCISE I

TESTING YOUR INTERNATIONAL-CULTURE IQ: Circle the correct answer.

1. *In Japan it is important to*
 - a. Present your business card only after you have developed a relationship with your Japanese host.
 - b. Present your business card with both hands.
 - c. Put your company name on the card, but never your position or title.
 - d. all of the above
 - e. none of the above

2. *For an American businessperson, touching a foreign businessperson would be least acceptable in which one of the following countries?*
 - a. Japan
 - b. Italy
 - c. Slovenia
 - d. Venezuela
 - e. France

Study Guide

3. *Which would be an appropriate gift?*
 - a. A clock in China
 - b. A bottle of liquor in Egypt
 - c. A set of knives in Argentina
 - d. A banquet in China
 - e. None of the above

4. *On first meeting your prospective Korean business partner, Lo Kim Chee, it would be best to address him as:*
 - a. Mr. Kim
 - b. Mr. Lo
 - c. Mr. Chee
 - d. Bud
 - e. Any of the above

5. *Traditional western banking is difficult in which of the following countries because their law forbids both the giving and taking of interest payments?*
 - a. Brazil
 - b. Saudi Arabia
 - c. Mongolia
 - d. India
 - e. Greece

Answers appear at the end of this study guide chapter.

ACTIVE LEARNING EXERCISE II

Resolving Employer-Employee Conflicts: What's Your Style? (A Behavioral Skill)

Hi-Tech Industries, a company that makes computer chips for installation in automobiles, is experiencing severe labor problems. For many years, everything seemed to flow quite nicely. The company would produce their products and distribute them worldwide at a very competitive price. But then things changed.

In the last year, the company has been losing money. Their products do not seem to be as competitive. When an analysis was conducted, the company decided that labor costs were simply too high and restructuring was in order.

Without warning, a memo was issued to all employees that some of them would no longer be needed. Labor costs were reportedly too high and some aspects of production and distribution had to be moved to countries with lower labor costs.

Study and Review Guide

To protest their predicament, the employees decided to strike. Threatening to shut down the company unless all employees were retained.

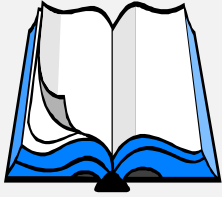
Using your best critical thinking, decide what managerial style would be most effective in this situation and how worker motivation and morale might be influenced by management's decisions.

My chosen managerial style would be _____

The employer issues of most concern are _____

The employee issues of most concern are _____

Possible compromises between employers and employees might be _____



CHAPTER OVERVIEW (Review)

The following CHAPTER OVERVIEW provides a narrative overview of the main topics covered in the chapter. Like the Visual Summary found at the end of each chapter in the text, this narrative summary provides a final opportunity to review chapter material.

I. Development of I/O Psychology *Industrial/organizational (I/O) psychology is the study of how individual behavior affects and is affected by the physical environment and the organizational structure of the workplace. Major founding figures were Walter Dill Scott, Fredrick W. Taylor, and Hugo Munsterberg.*

The personnel needs of World War I gave the I/O field respectability. Based on newly developed group IQ tests, Walter Dill Scott developed a program to place recruits in jobs that suited their abilities.

Among important I/O research findings during this period was a phenomenon termed the Hawthorne effect, when people change their behavior because of the novelty of a research situation or because they know that they are being observed.

World War II led to scientifically designed worker training programs to improve productivity for the war effort. After the war, many I/O psychologists turned their attention from the manufacturing floor to the executive management offices, thereby creating organizational psychology.

The Civil Rights Act of 1964 required I/O psychology to create employment tests, training programs, and recruitment programs that were fair to all job applicants regardless of ethnicity, religion, age, or gender.

II. Human Factors Psychology *Human factors psychology is a branch of I/O psychology that studies ways to improve the design and function of machines and the work environment to better meet the needs of human users.*

Researchers consider humans and the machines they use a human--machine system, an arrangement of people and machines, tools, and other devices that produce a product or service. The human side of the system consists of sensory functions (input) and cognitive and motor functions (output); the machine side consists of displays (output) and controls (input)

III. Personnel Psychology *Personnel psychology involves recruiting, selecting, training, and evaluating workers. Interviews are the most popular method of choosing the most qualified candidate. Structured interviews are better predictors of future job performance than unstructured interviews.*

Prepare for an interview by doing research on the company, role playing with a friend, and emphasizing desirable personality traits.

Employee training typically begins with an orientation program. One of the major unstated goals of orientation is transmitting the organizational culture---the group's shared pattern of thought and action.

Performance evaluation is the formal procedure an organization uses to assess the job performance of employees. Evaluations can be objective or subjective.

The subjective method is the most popular, but the halo effect (the tendency to rate individuals too high or too low based on one outstanding trait) can create a major problem. To overcome the halo effect, some organizations use "360-degree" multisource measures and special rating scales.

Sexual harassment involves sexual advances, requests for sexual favors, and other unwelcome verbal or physical conduct of a sexual nature. Most sexual harassment is an assertion or abuse of power, not an expression of sexual desire. Victims of sexual harassment often suffer financial losses and psychological difficulties

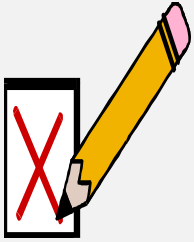
IV. Organizational Psychology *Organizational psychologists study how interpersonal relations affect productivity. Theory X managers take a negative approach, believing employees need close supervision and extrinsic rewards for motivation. Theory Y managers are positive and believe employees are self-motivated. Theory Y managers often use participative decision making, such as quality circles—groups of employees who meet regularly with supervisors to solve problems.*

Goal setting is one major way to motivate workers; having specific and difficult goals improves performance. Equity theory says workers are motivated if they perceive that their job inputs match the perceived rewards. Expectancy theory, on the other hand, maintains that employees are motivated to work according to their expectancy of outcomes, the desirability of those outcomes, and the effort needed to achieve them.

Job satisfaction is important to both employer and employee. Employers gain because they save money (lower absenteeism and fewer resignations) and increase productivity. Employees gain because they are under less stress, enjoy better physical health, and have an improved overall quality and length of life.

According to personality-fit theory, job satisfaction results from a match between personality and occupation. Supportive colleagues, supportive working conditions, mentally challenging work, and equitable rewards are also important.

SELF-TESTS (Review & write)



Completing the following SELF-TESTS will provide immediate feedback on how well you have mastered the material. In the *fill-in exercises*, write the appropriate word or words in the blank spaces. The *matching exercise* requires you to match the terms in one column to their correct definitions in the other. For the *multiple-choice questions* in Practice Tests I and II, circle or underline the correct answer. When you are unsure of any answer, be sure to highlight or specially mark the item and then go back to the text for further review. Correct answers are provided at the end of this study guide chapter.

FILL-IN EXERCISES

1. _____ psychology studies how the physical environment and organizational culture of the workplace affect individual behavior (p. 620).
2. The phenomenon that occurs when people change their behavior because of the novelty of the research situation or because they know they are being observed is known as the _____ (p. 623).
3. A _____ system is an arrangement of people and machines, tools, and other devices that produce a product or service (p. 626).
4. Machines “talk” to humans through their _____, while humans “talk” to machines through their _____ (pp. 628-629).
5. _____ psychologists are involved with recruiting, selecting, training, and evaluating workers (p. 631).
6. When choosing a candidate for a job, the _____ is the most popular and most heavily weighted of all selection devices (p. 631).
7. The tendency to rate individuals either too high or too low on the basis of one outstanding trait is known as the _____ (p. 636).
8. Unwelcome sexual advances, requests for sexual favors, and other unwelcome verbal or physical conduct of a sexual nature are known as _____ (p. 637).
9. According to _____, employees like work, are industrious, seek responsibility, and can exercise self-direction (p. 640).

10. According to _____, worker motivation is determined by expectancy of outcomes, their desirability, and the effort needed to achieve them (p. 642).

MATCHING EXERCISES

Column A

Column B

- | | |
|-----------------------------|--|
| a. Theory X | 1. ____ Balance of input and rewards improves motivation. |
| b. Quality Circles | 2. ____ Group's shared pattern of thought and action. |
| c. Goal Setting Theory | 3. ____ An abuse of power, not necessarily sexual desire. |
| d. Performance Evaluation | 4. ____ List of job required skills, knowledge, and activities. |
| e. Organizational Culture | 5. ____ Employee groups meeting with supervisors. |
| f. Human Factors Psychology | 6. ____ Studies machine design and function and worker needs. |
| g. Human-Machine System | 7. ____ Negative managerial style believing workers dislike work. |
| h. Job Analysis | 8. ____ Formal procedure to assess employee job performance. |
| i. Sexual Harassment | 9. ____ Setting specific and difficult goals improves performance. |
| j. Equity Theory | 10. ____ Displays and controls. |

PRACTICE TEST I

- Jose is a(n) _____ psychologist who enjoys studying and analyzing the design of the work environment as a way to maximize efficiency and safety.
 - human factors
 - organizational
 - environmental
 - personnel
- Which of the following was an important figure in the development of I/O psychology?
 - John B. Watson
 - Walter Dill Pickle
 - Hugo Munsterberg
 - William James
- According to the _____ effect, people change their individual behavior because of the novelty of the research situation or because they know they are being observed.
 - halo
 - Hawthorne
 - observer
 - imaginary audience

Study Guide

4. While driving, you stop singing loudly when you notice that another driver is staring at you. This change in your behavior is probably due to the _____.
 - a. social comparison phenomenon
 - b. Hawthorne effect
 - c. social desirability effect
 - d. need for social compliance

5. The arrangement of people and machines, tools, and other devices used to produce a product or service is called _____.
 - a. ergonomics
 - b. a human-machine system
 - c. auto-motor coordination
 - d. human factors industrial designing

6. An I/O psychologist interested in human factors would most likely participate in _____.
 - a. the collection of biodata
 - b. vocational interest testing
 - c. training and selection of employees
 - d. machine design

7. The best way to improve the design of a machine is to _____.
 - a. match its displays and controls to human sensory-motor skills
 - b. educate the consumer regarding appropriate operating procedures
 - c. monitor the machine's everyday use and develop self-corrections
 - d. employ human factors psychologists to train machine operators

8. A job analysis involves all but which of the following?
 - a. identifying the tasks involved in a job
 - b. evaluating biodata collected from job candidates
 - c. determining the relationship between that job and other jobs
 - d. identifying the knowledge, skills, and abilities necessary to perform the job successfully

9. The most frequently used applicant selection device is a(n) _____.
 - a. interview
 - b. written test
 - c. observation
 - d. knowledge and skills test

Study and Review Guide

10. Most people dislike being interviewed due to their nervousness, the subjectivity of the situation, and the _____.
 - a. Hawthorne effect
 - b. halo effect
 - c. norm of social reciprocity
 - d. "first date" syndrome

11. Before going on a job interview, your text suggests that you research the company, improve your friendliness, eagerness, and assertiveness, and _____.
 - a. employ a wardrobe consultant
 - b. role-play the interviewer and interviewee
 - c. perform your own job analysis
 - d. set up alternative interviews to increase your competitive edge

12. Employee training provides employees with appropriate skills, and _____.
 - a. reduces worker frustration and stress
 - b. increases profits and job satisfaction
 - c. reduces absenteeism and employee-management conflict
 - d. increases the halo effect

13. Which of the following is true?
 - a. Sexual harassment has not occurred if no mention is made of performing sex.
 - b. Subordinates cannot sexually harass their supervisors.
 - c. Sexual harassment is generally an assertion and abuse of power.
 - d. Most women who are sexually harassed report it to their supervisor.

14. The tendency to rate individuals on the basis of one outstanding trait is called _____.
 - a. the halo effect
 - b. a trait bias
 - c. narrowing of the field
 - d. gender discrimination

15. _____ managers believe that employees dislike work, are lazy, avoid responsibility, and must be prodded or manipulated to perform.
 - a. Theory Q
 - b. Theory X
 - c. Theory Y
 - d. Theory Z

Study Guide

16. Terry often arrives late for work and is the first to leave at the end of the day. The best supervisor for this employee might be a _____ manager.
 - a. Theory X
 - b. Theory Y
 - c. Theory Z
 - d. Theory Q

17. _____ theory suggests that specific and difficult goals lead to higher performance.
 - a. Goal-setting
 - b. Work ethic
 - c. Challenge
 - d. Japanese excellence

18. _____ theory proposes that individuals are driven by a need to maintain equilibrium or balance, and prefer jobs where output is equal to input.
 - a. Balance
 - b. Equity
 - c. Gain-loss
 - d. Expectancy

19. Xavier is willing to work hard if pay is good, he has a reasonable shot at promotion, and is treated with respect. Xavier would prefer a manager who believed in the _____ theory.
 - a. expectancy
 - b. fairness
 - c. equity
 - d. balance

20. According to your text, which of the following is most likely to lead to high job satisfaction?
 - a. matching personality with occupation
 - b. promotion practices based on seniority
 - c. having an outgoing personality
 - d. working alone

PRACTICE TEST II

1. If you owned a company and were having trouble with employees, managers, and safety concerns, which of the following professionals should you hire?
 - a. a new CEO
 - b. a business manager
 - c. an I/O psychologist
 - d. an employee assistance psychologist

Study and Review Guide

2. Which of the following persons was **NOT** involved with initiating and developing I/O psychology in its early years?
 - a. Walter Dill Scott
 - b. Frederick W. Taylor
 - c. Hugo Munsterberg
 - d. Hawthorne Works

3. The _____ study taught psychologists and businesses that the social system in the workplace could dramatically affect worker's behavior.
 - a. Hawthorne
 - b. Yerkes
 - c. Taylor
 - d. Scott

4. _____ required employers to use fair, nondiscriminatory, and reliable practices in recruiting, screening, hiring, and training job applicants and employees.
 - a. Senate Bill 1099
 - b. The 1964 Civil Rights Act
 - c. The EEOC
 - d. House Bill 1099

5. Machine displays, machine controls, and human sensory-motor abilities are all part of _____.
 - a. Data, the robot on Star Trek: The Next Generation
 - b. a human-machine system
 - c. a cybernetic robot
 - d. the industrial/organizational complex

6. In a human-machine system, the output is the _____.
 - a. machine's displays
 - b. machine's controls
 - c. human's sensory-motor abilities
 - d. final product or service

7. Which of the following methods is most preferred by employers and the best predictor of job qualifications?
 - a. biodata
 - b. a standardized psychological test
 - c. a structured interview
 - d. an unstructured interview

Study Guide

8. Which of the following improves worker skills and reduces frustration and stress.
 - a. job training
 - b. job analysis
 - c. access to an employee assistance program
 - d. an organizational culture

9. Diversity training is designed to _____.
 - a. increase the diversity of employee skills
 - b. decrease the diversity of employee demands
 - c. teach employees how to work with coworkers from diverse ethnic groups
 - d. increase the diversity of a company's products and services

10. To avoid a culture-clash, you should **NOT** do this when doing business in Canada.
 - a. do business at lunch rather than at dinnertime
 - b. do not enter the kitchen unless invited
 - c. be modest with gifts and product or service presentations
 - d. salute your deal with the V-sign, palm facing out

11. One reason many businesses do not use objective performance evaluations is because _____.
 - a. they are less reliable
 - b. they are less valid
 - c. there may not be an identifiable or measurable task to evaluate
 - d. the halo effect cannot be standardized

12. Sexual remarks and teasing would fall in what category of sexual harassment?
 - a. less severe
 - b. severe
 - c. criminal
 - d. none of these options; this would not be sexual harassment

13. Ignoring sexual harassment is recommended when _____.
 - a. it is less severe
 - b. it has happened only a few times
 - c. your job could be in jeopardy
 - d. none of these options; your text does not recommend that you ignore it

14. Job satisfaction, worker motivation, and managerial style are all areas of interest in _____ psychology.
 - a. industrial
 - b. organizational
 - c. human-factors
 - d. personnel

Study and Review Guide

15. Participative decision making results in improved worker efficiency and _____.
 - a. team work
 - b. job satisfaction
 - c. the halo effect
 - d. the Hawthorne effect

16. Differences in organizational culture are a major reason _____ has (have) not worked in the United States.
 - a. human factors psychologists
 - b. supply and demand
 - c. quality circles
 - d. Theory X

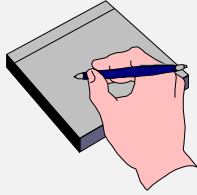
17. According to Holland's personality-job fit model, someone who scores as self-confident, ambitious, and domineering should probably pursue a career as a _____.
 - a. lawyer
 - b. mechanic
 - c. accountant
 - d. news reporter

18. Robbins found that supportive colleagues, supportive working conditions, and equitable rewards increase _____.
 - a. absenteeism
 - b. job satisfaction
 - c. job longevity
 - d. job choice

19. Economic uncertainty, excessive workload, constant giving, and _____ have been listed as occupational hazards by psychotherapists.
 - a. dissatisfied clients
 - b. violent clients
 - c. fear of losing their own sanity
 - d. suicidal clients

20. This is an example of the appropriate use of humor to reduce job stress.
 - a. tell jokes about your coworkers
 - b. make fun of your clients or customers
 - c. laugh at your boss behind her back
 - d. break a minor norm

Study Guide



ANSWERS

The following answers to active learning exercises, fill-ins, matching exercises, and practice tests 1 and 2 provide immediate feedback on your mastery of the material. Try not to simply memorize the answers. When you are unsure of your “guess” or make an error, be sure to go back to the textbook and carefully review. This will greatly improve your scores on classroom exams and quizzes.

ACTIVE LEARNING EXERCISE I

International-culture IQ Answers: 1. b, 2. a, 3. d, 4. b, 5. b

Scores of 4 or more indicate a high level of cultural awareness. Scores of 2 or less suggest need for improvement.

FILL-IN EXERCISES

1. Industrial/Organizational; 2. Hawthorne effect; 3. human-machine; 4. displays, controls; 5. Personnel; 6. interview; 7. halo effect; 8. sexual harassment; 9. Theory Y; 10. expectancy theory.

MATCHING EXERCISES

a. 7, b. 5, c. 9, d. 8, e. 2, f. 6, g. 10, h. 4, i. 3, j. 1

<u>PRACTICE TEST I</u>		<u>PRACTICE TEST II</u>	
1. a (p. 620)	11. b (p. 632)	1. c (p. 620)	11. c (p. 636)
2. c (p. 621)	12. a (p. 633)	2. d (p. 621)	12. a (p. 637)
3. b (p. 623)	13. c (p. 638)	3. a (p. 623)	13. d (p. 639)
4. b (p. 623)	14. a (p. 636)	4. b (p. 625)	14. b (p. 639)
5. b (p. 626)	15. b (p. 640)	5. b (pp. 626-27)	15. b (p. 640)
6. d (p. 626)	16. a (p. 640)	6. d (p. 626)	16. c (p. 641)
7. a (p. 628)	17. a (p. 641)	7. c (p. 631)	17. a (pp. 644-45)
8. b (p. 631)	18. d (p. 642)	8. a (p. 633)	18. b (p. 647)
9. a (p. 631)	19. a (p. 642)	9. c (p. 631)	19. d (p. 645)
10. d (p. 632)	20. a (p. 643)	10. d (p. 634)	20. d (p. 645)