

Prologue: The Story of Psychology

PROLOGUE OVERVIEW

Psychology's historical development and current activities lead us to define the field as the science of behavior and mental processes. This Prologue discusses the development of psychology from ancient times until today and the range of behaviors and mental processes being investigated by psychologists in each of the various specialty areas. In addition, it introduces the biopsychosocial approach that integrates the three main levels of analysis followed by psychologists working from the seven major perspectives. Next is an overview of the diverse subfields in which psychologists conduct research and provide professional services.

The Prologue concludes with a Close-Up explaining how to get your study of psychology off on the right foot by learning (and pledging to follow!) the SQ3R study method. This study method is also discussed in the essay at the beginning of this Study Guide.

NOTE: Answer guidelines for all Prologue questions begin on page 10.

PROLOGUE REVIEW

First, skim each section, noting headings and boldface items. After you have read the section, review each objective by answering the fill-in questions that follow it. As you proceed, evaluate your performance by consulting the answers on page 10. Do not continue with the next section until you understand each answer. If you need to, review or reread the section in the textbook before continuing.

Psychology's Roots (pp. 2–8)

David Myers at times uses idioms that are unfamiliar to some readers. If you do not know the meaning of any of the following words, phrases, or expressions in the context in which they appear in the Introduction and this section, refer to page 14 for an explanation: *peek-a-boo*; *grist for psychology's mill*; *unpack this definition*; *hunches*; *down-to-earth*; *structuralism waned*; *wise-cracking*; *"Magellans of the mind."*

Objective 1: Define *psychology*.

1. The author of your text defines psychology as the scientific study of _____ and _____ processes.
2. In this definition, "behavior" refers to any action that we can _____ and _____, and "mental processes" refers to the internal _____ we _____ from behavior.
3. As a science, psychology is less a set of findings than a way of _____.

Objective 2: Trace psychology's prescientific roots, from early understandings of mind and body to the beginnings of modern science.

4. In the prescientific era, scholars such as _____ in India and _____ in China pondered the relationship between mind and body.

5. The Greek philosophers _____ and _____ viewed mind and body as _____ (inseparable/separable), and assumed that knowledge is _____ (innate/learned). The Greek philosopher who argued that all knowledge comes from experiences stored in memories is _____. Unlike his teacher, who derived principles from _____, he derived principles from careful _____.
6. In the 1600s, the views of the Greek philosophers were revived by _____, who believed that some ideas are innate; by Englishman _____, who became one of the founders of modern science; and by _____, who believed that knowledge originates in experience. This idea, along with the principle that science flourishes through observation and experiment, is called _____.

Objective 3: Explain how the early psychologists sought to understand the mind's structure and functions, and identify some of the leading psychologists who worked in these areas.

7. The first psychological laboratory was founded in 1879 by Wilhelm _____. His student, _____, introduced the school of _____, which explored the basic elements of mind using the method of _____. This method proved _____ (reliable/unreliable), and psychologist _____ introduced the school of _____, which focused on how mental and behavioral processes enable the organism to adapt, survive, and flourish.
8. The first female president of the American Psychological Association was _____. The first woman to receive a Ph.D. in psychology was _____.

Objective 4: Describe the evolution of psychology from the 1920s through today.

9. The historical roots of psychology include the fields of _____ and _____.
10. Some early psychologists included Ivan Pavlov, who pioneered the study of _____; the personality theorist _____; and Jean Piaget, who studied _____.
11. In its earliest years, psychology was defined as the science of _____ life. From the 1920s into the 1960s, psychology in America was redefined as the science of _____ behavior. The author of your text defines psychology as the science of _____ and _____ processes.
12. As a response to Freudian psychology and to _____, which they considered too mechanistic, pioneers _____ and _____ forged _____ psychology. This new perspective emphasized the _____ potential of _____ people.
13. During the 1960s, psychology underwent a _____ revolution as it began to recapture interest in _____ processes. The study of the interaction of thought processes and _____ function is called _____.

Contemporary Psychology (pp. 8–14)

If you do not know the meaning of any of the following words, phrases, or expressions in the context in which they appear in the text, refer to pages 14–15 for an explanation: *mushrooming*; *wrestled with some issues*; *rekindled the debate*; *weaves a thread*; *nature-nurture tension dissolves*; *"Red in the face" and "hot under the collar"*; *But there is a payoff*; *psychoceramics*.

- Worldwide, the number of psychologists is _____ (increasing/decreasing).

Objective 5: Summarize the nature-nurture debate in psychology, and describe the principle of natural selection.

- The nature-nurture issue is the controversy over the relative contributions of _____ and _____.
- The Greek philosopher who assumed that character and intelligence are inherited is _____. The Greek philosopher who argued that all knowledge comes from sensory experience is _____.
- In the 1600s, the views of the Greek philosophers were revived by _____, who believed that most knowledge comes in through the senses, and _____, who believed that some ideas are innate.
- In 1859, naturalist _____ explained species variation by proposing the process of _____, which works through the principle of _____.

Objective 6: Identify the three main levels of analysis in the biopsychosocial approach, and explain why psychology's varied perspectives are complementary.

- Each person is a complex _____ that is part of a larger _____ and at the same time composed of smaller systems. For this reason, psychologists work from three main _____ of _____—biological, _____, and _____—which together form an integrated _____ approach to the study of behavior and mental processes.
- Psychologists who study how the body and brain enable emotions, memories, and sensory experiences are working from the _____ perspective.

- Psychologists who study how natural selection influences behavior tendencies are working from the _____ perspective, whereas those concerned with the relative influences of genes and environment on individual differences are working from the _____ perspective.
- Psychologists who believe that behavior springs from unconscious drives and conflicts are working from the _____ perspective.
- Psychologists who study the mechanisms by which observable responses are acquired and changed are working from the _____ perspective.
- The _____ perspective explores how our minds encode, process, store, and retrieve information.
- Psychologists who study how thinking and behavior vary in different situations are working from the _____ perspective.
- The different perspectives on the big issues _____ (contradict/complement) one another.

Objective 7: Identify some of psychology's subfields, and explain the difference between clinical psychology and psychiatry.

- Psychologists may be involved in conducting _____, which builds psychology's knowledge base, or _____, which seeks solutions to practical problems.
- Psychologists who help people cope with problems in living are called _____ psychologists. Psychologists who study, assess, and treat troubled people are called _____ psychologists.
- Medical doctors who provide psychotherapy and treat physical causes of psychological disorders are called _____.

Close-Up: Your Study of Psychology
(pp. 15–16)

If you do not know the meaning of the following expression in the context in which it appears in the text, refer to page 15 for an explanation: *spaced practice*.

Objective 8: State five effective study techniques.

1. In order to master any subject, you must _____ process it.
2. The _____ study method incorporates five steps: a. _____, b. _____, c. _____, d. _____, and e. _____.

List five additional study tips identified in the text.

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____

PROGRESS TEST 1

Multiple-Choice Questions

Circle your answers to the following questions and check them with the answers beginning on page 10. If your answer is incorrect, read the explanation for why it is incorrect and then consult the appropriate pages of the text (in parentheses following the correct answer).

1. In its earliest days, psychology was defined as the:
 - a. science of mental life.
 - b. study of conscious and unconscious activity.
 - c. scientific study of observable behavior.
 - d. scientific study of behavior and mental processes.
2. Who would be most likely to agree with the statement, "Psychology should investigate only behaviors that can be observed"?
 - a. Wilhelm Wundt
 - b. Sigmund Freud
 - c. John B. Watson
 - d. William James

3. Today, psychology is defined as the:
 - a. scientific study of mental phenomena.
 - b. scientific study of conscious and unconscious activity.
 - c. scientific study of behavior.
 - d. scientific study of behavior and mental processes.
4. Who introduced the early school of structuralism?
 - a. Edward Titchener
 - b. Wilhelm Wundt
 - c. William James
 - d. Mary Whiton Calkins
5. Who wrote the early textbook *Principles of Psychology*?

a. Wilhelm Wundt	c. Jean Piaget
b. Ivan Pavlov	d. William James
6. Psychologists who study the degree to which genes influence our personality are working from the _____ perspective.

a. behavioral	c. behavior genetics
b. evolutionary	d. neuroscience
7. Which of the following exemplifies the issue of the relative importance of nature and nurture on our behavior?
 - a. the issue of the relative influence of biology and experience on behavior
 - b. the issue of the relative influence of rewards and punishments on behavior
 - c. the debate as to the relative importance of heredity and instinct in determining behavior
 - d. the debate as to whether mental processes are a legitimate area of scientific study
8. The seventeenth-century philosopher who believed that the mind is blank at birth and that most knowledge comes through sensory experience is:

a. Plato.	c. Descartes.
b. Aristotle.	d. Locke.
9. Which seventeenth-century philosopher believed that some ideas are innate?
 - a. Aristotle
 - b. Plato
 - c. Descartes
 - d. Locke

10. Which psychological perspective emphasizes the interaction of the brain and body in behavior?
 - a. neuroscience
 - b. cognitive
 - c. behavioral
 - d. behavior genetics
11. A psychologist who explores how Asian and North American definitions of attractiveness differ is working from the _____ perspective.
 - a. behavioral
 - b. evolutionary
 - c. cognitive
 - d. social-cultural
12. A psychologist who conducts experiments solely intended to build psychology's knowledge base is engaged in:
 - a. basic research.
 - b. applied research.
 - c. industrial-organizational research.
 - d. clinical research.
13. Psychologists who study, assess, and treat troubled people are called:
 - a. basic researchers.
 - b. applied psychologists.
 - c. clinical psychologists.
 - d. psychiatrists.
14. Today, psychology is a discipline that:
 - a. connects with a diversity of other fields.
 - b. is largely independent of other disciplines.
 - c. is focused primarily on basic research.
 - d. is focused primarily on applied research.
15. (Close-Up) In order, the sequence of steps in the SQ3R method is:
 - a. survey, review, question, read, reflect.
 - b. review, question, survey, read, reflect.
 - c. question, review, survey, read, reflect.
 - d. survey, question, read, review, reflect.
16. Francis Bacon's ideas led most directly to the scholarly view known as:
 - a. functionalism.
 - b. structuralism.
 - c. empiricism.
 - d. introspection.

Matching Items

Match each psychological perspective, school, and subfield with its definition or description.

Terms

- _____ 1. neuroscience perspective
- _____ 2. social-cultural perspective
- _____ 3. psychiatry
- _____ 4. clinical psychology
- _____ 5. behavior genetics perspective
- _____ 6. behavioral perspective
- _____ 7. industrial/organizational psychology
- _____ 8. cognitive perspective
- _____ 9. basic research
- _____ 10. applied research
- _____ 11. evolutionary perspective
- _____ 12. psychodynamic perspective
- _____ 13. structuralism
- _____ 14. functionalism
- _____ 15. empiricism

Definitions or Descriptions

- a. behavior in the workplace
- b. how people differ as products of different environments
- c. the study of practical problems
- d. an early school of psychology that used introspection to explore the contents of the mind
- e. the mechanisms by which observable responses are acquired and changed
- f. how the body and brain create emotions, memories, and sensations
- g. how the mind encodes, processes, stores, and retrieves information
- h. the view that science flourishes through observation and experimentation
- i. how natural selection favors traits that promote the perpetuation of one's genes
- j. the study, assessment, and treatment of troubled people
- k. the medical treatment of psychological disorders
- l. the disguised effects of unfulfilled wishes and childhood traumas
- m. adds to psychology's knowledge base
- n. an early school of psychology that focused on the adaptive value of thoughts and behaviors
- o. how much genes and environment contribute to individual differences

PROGRESS TEST 2

Progress Test 2 should be completed during a final chapter review. Answer the following questions after you thoroughly understand the correct answers for the section reviews and Progress Test 1.

Multiple-Choice Questions

1. The first psychology laboratory was established by _____ in the year _____ .
 - a. Wundt; 1879
 - b. James; 1890
 - c. Freud; 1900
 - d. Watson; 1913
2. Who would be most likely to agree with the statement, "Psychology is the science of mental life"?
 - a. Wilhelm Wundt
 - b. John Watson
 - c. Ivan Pavlov
 - d. virtually any American psychologist during the 1960s
3. In psychology, "behavior" is best defined as:
 - a. anything a person says, does, or feels.
 - b. any action we can observe and record.
 - c. any action, whether observable or not.
 - d. anything we can infer from a person's actions.

4. Carl Rogers and Abraham Maslow are most closely associated with:
- cognitive psychology.
 - behaviorism.
 - psychodynamic theory.
 - humanistic psychology.
5. In defining psychology, the text notes that psychology is most accurately described as a:
- way of asking and answering questions.
 - field engaged in solving applied problems.
 - set of findings related to behavior and mental processes.
 - nonscientific approach to the study of mental disorders.
6. Two historical roots of psychology are the disciplines of:
- philosophy and chemistry.
 - physiology and chemistry.
 - philosophy and biology.
 - philosophy and physics.
7. The Greek philosopher who believed that intelligence was inherited was:
- Aristotle.
 - Plato.
 - Descartes.
 - Simonides.
8. The way the mind encodes, processes, stores, and retrieves information is the primary concern of the _____ perspective.
- neuroscience
 - evolutionary
 - social-cultural
 - cognitive
9. Which of the following individuals is also a physician?
- clinical psychologist
 - experimental psychologist
 - psychiatrist
 - biological psychologist
10. Dr. Jones' research centers on the relationship between changes in our thinking over the life span and changes in moral reasoning. Dr. Jones is most likely a:
- clinical psychologist.
 - personality psychologist.
 - psychiatrist.
 - developmental psychologist.
11. Which subfield is most directly concerned with studying human behavior in the workplace?
- clinical psychology
 - personality psychology
 - industrial/organizational psychology
 - psychiatry
12. Dr. Ernst explains behavior in terms of different situations. Dr. Ernst is working from the _____ perspective.
- behavioral
 - evolutionary
 - social-cultural
 - cognitive
13. Which perspective emphasizes the learning of observable responses?
- behavioral
 - social-cultural
 - neuroscience
 - cognitive
14. A psychologist who studies how worker productivity might be increased by changing office layout is engaged in _____ research.
- applied
 - basic
 - clinical
 - developmental
15. (Close-Up) A major principle underlying the SQ3R study method is that:
- people learn and remember material best when they actively process it.
 - many students overestimate their mastery of text and lecture material.
 - study time should be spaced over time rather than crammed into one session.
 - "overlearning" disrupts efficient retention.
16. The biopsychosocial approach emphasizes the importance of:
- different levels of analysis in exploring behavior and mental processes.
 - basic research over pure research.
 - pure research over basic research.
 - having a single academic perspective to guide research.

True-False Items

Place a T or an F in the blank next to each statement.

- _____ 1. Psychology's three main levels of analysis often contradict each other.
- _____ 2. The primary research tool of the first psychologists was the experiment.
- _____ 3. The subject matter of psychology has changed over the history of the field.
- _____ 4. Every psychological event is simultaneously a biological event.
- _____ 5. Today, most psychologists work within the behavioral perspective.
- _____ 6. The major perspectives in psychology contradict one another.

- _____ 7. (Close-Up) "Spaced practice" promotes better retention than "massed practice."
- _____ 8. (Close-Up) "Overlearning" hinders retention.
- _____ 9. A major goal of psychology is to teach us how to ask important questions and to think critically as we evaluate competing ideas.
- _____ 10. One reason the school of structuralism fell from favor is that the method of introspection was unreliable.
5. Professor Gutierrez, who believes that human emotions are best understood as being jointly determined by heredity, learning, and the individual's social and cultural contexts, is evidently a proponent of the:
- psychodynamic perspective.
 - biopsychosocial approach.
 - evolutionary perspective.
 - neuroscience perspective.
6. The philosophical views of John Locke are to those of René Descartes as _____ is to _____.
- nature; nurture
 - nurture; nature
 - rationality; irrationality
 - irrationality; rationality

PSYCHOLOGY APPLIED

Answer these questions the day before an exam as a final check on your understanding of the chapter's terms and concepts.

Multiple-Choice Questions

- Psychology is defined as the "scientific study of behavior and mental processes." Wilhelm Wundt would have omitted which of the following words from this definition?
 - scientific study
 - behavior and
 - and mental processes
 - Wundt would have agreed with the definition as stated.
- Jawan believes that psychologists should go back to using introspection as a research tool. This technique is based on:
 - survey methodology.
 - experimentation.
 - self-examination of mental processes.
 - the study of observable behavior.
- Dharma's term paper on the history of American psychology notes that:
 - psychology began as the science of mental life.
 - from the 1920s into the 1960s, psychology was defined as the scientific study of observable behavior.
 - contemporary psychologists study both overt behavior and covert thoughts.
 - all of the above are true.
- Terrence wants to talk to a professional to help him cope with some academic challenges he's facing. You recommend that he contact a(n):
 - industrial/organizational psychologist.
 - developmental psychologist.
 - counseling psychologist.
 - psychiatrist.
- To say that "psychology is a science" means that:
 - psychologists study only observable behaviors.
 - psychologists approach the study of thoughts and actions with careful observation and rigorous analysis.
 - psychological research should be free of value judgments.
 - all of the above are true.
- In concluding her report on the "nature-nurture debate in contemporary psychology," Karen notes that:
 - most psychologists believe that nature is a more important influence on the development of most human traits.
 - most psychologists believe that nurture is more influential.
 - the issue is more heatedly debated than ever before.
 - nurture works on what nature endows.
- Dr. Waung investigates how a person's interpretation of a situation affects his or her reaction. Evidently, Dr. Waung is working from the _____ perspective.

a. neuroscience	c. cognitive
b. behavioral	d. social-cultural
- Dr. Aswad is studying people's enduring inner traits. Dr. Aswad is most likely a(n):
 - clinical psychologist.
 - psychiatrist.
 - personality psychologist.
 - industrial/organizational psychologist.

11. The psychological perspective that places the *most* emphasis on how observable responses are learned is the _____ perspective.
- behavioral
 - cognitive
 - behavior genetics
 - evolutionary
12. During a dinner conversation, a friend says that the cognitive and behavioral perspectives are quite similar. You disagree and point out that the cognitive perspective emphasizes _____, whereas the behavioral perspective emphasizes _____.
- conscious processes; observable responses
 - unconscious processes; conscious processes
 - overt behaviors; covert behaviors
 - introspection; experimentation
13. Concerning the major psychological perspectives on behavior, the text author suggests that:
- researchers should work within the framework of only one of the perspectives.
 - only those perspectives that emphasize objective measurement of behavior are useful.
 - the different perspectives often complement one another; together, they provide a fuller understanding of behavior than provided by any single perspective.
 - psychologists should avoid all of these traditional perspectives.
14. (Close-Up) Your roommate announces that her schedule permits her to devote three hours to studying for an upcoming quiz. You advise her to:
- spend most of her time reading and rereading the text material.
 - focus primarily on her lecture notes.
 - space study time over several short sessions.
 - cram for three hours just before the quiz.
15. (Close-Up) A fraternity brother rationalizes the fact that he spends very little time studying by saying that he "doesn't want to peak too soon and have the test material become stale." You tell him that:
- he is probably overestimating his knowledge of the material.
 - if he devotes extra time to studying, his retention of the material will be improved.
 - the more often students review material, the better their exam scores.
 - all of the above are true.
16. The psychological views of William James are to those of Edward Titchener as _____ is to _____.
- nature; nurture
 - nurture; nature
 - structuralism; functionalism
 - functionalism; structuralism

Essay Question

Explain how researchers working from each of psychology's major perspectives might investigate an emotion such as love. (Use the space below to list the points you want to make, and organize them. Then write the essay on a separate piece of paper.)

KEY TERMS

Using your own words, on a separate piece of paper write a brief definition or explanation of each of the following.

- psychology
- empiricism
- structuralism
- functionalism
- humanistic psychology
- nature-nurture issue
- natural selection
- levels of analysis
- biopsychosocial approach
- basic research
- applied research
- counseling psychology
- clinical psychology
- psychiatry

ANSWERS**Chapter Review***Psychology's Roots*

1. behavior; mental
2. observe; record; subjective experiences; infer
3. asking and answering questions
4. Buddha; Confucius
5. Socrates; Plato; separable; innate; Aristotle; logic; observation
6. Descartes; Francis Bacon; John Locke; empiricism
7. Wundt; Edward Titchener; structuralism; introspection; unreliable; William James; functionalism
8. Mary Calkins; Margaret Washburn
9. biology; philosophy
10. learning; Sigmund Freud; children
11. mental; observable; behavior; mental
12. behaviorism; Carl Rogers; Abraham Maslow; humanistic; growth; healthy
13. cognitive; mental; brain; cognitive neuroscience

Contemporary Psychology

1. increasing
2. biology; experience
3. Plato; Aristotle
4. Locke; Descartes
5. Charles Darwin; evolution; natural selection
6. system; social system; levels; analysis; psychological; social-cultural; biopsychosocial
7. neuroscience
8. evolutionary; behavior genetics
9. psychodynamic
10. behavioral
11. cognitive
12. social-cultural
13. complement
14. basic research; applied research
15. counseling; clinical
16. psychiatrists

Close-Up: Your Study of Psychology

1. actively

2. SQ3R; a. survey; b. question; c. read; d. review; e. reflect
 - a. Distribute study time.
 - b. Listen actively in class.
 - c. Overlearn material.
 - d. Focus on the big ideas.
 - e. Be a smart test-taker.

Progress Test 1*Multiple-Choice Questions*

1. a. is the answer. (p. 7)
 - b. Psychology has never been defined in terms of conscious and unconscious activity.
 - c. From the 1920s into the 1960s, psychology was defined as the scientific study of observable behavior.
 - d. Psychology today is defined as the scientific study of behavior and mental processes. In its earliest days, however, psychology focused exclusively on mental phenomena.
2. c. is the answer. (p. 7)
 - a. Wilhelm Wundt, the founder of the first psychology laboratory, was seeking to measure the simplest mental processes.
 - b. Sigmund Freud developed an influential theory of personality that focused on unconscious processes.
 - d. William James, author of the early textbook *Principles of Psychology*, was a philosopher and was more interested in mental phenomena than observable behavior.
3. d. is the answer. (p. 2)
 - a. In its earliest days psychology was defined as the science of mental phenomena.
 - b. Psychology has never been defined in terms of conscious and unconscious activity.
 - c. From the 1920s into the 1960s, psychology was defined as the scientific study of behavior.
4. a. is the answer. (p. 4)
5. d. is the answer (p. 6)
 - a. Wilhelm Wundt founded the first psychology laboratory.
 - b. Ivan Pavlov pioneered the study of learning.
 - c. Jean Piaget was this century's most influential observer of children.
6. c. is the answer. (p. 11)
7. a. is the answer. Biology and experience are internal and external influences, respectively. (p. 9)
 - b. Rewards and punishments are both external influences on behavior.
 - c. Heredity and instinct are both internal influences on behavior.

- d. The legitimacy of the study of mental processes does not relate to the internal/external issue.
8. d. is the answer. For Locke, the mind at birth was a blank tablet. (p. 3)
- a. Plato assumed that much of intelligence is inherited and therefore present at birth. Moreover, he was a philosopher of ancient Greece.
- b. Aristotle held essentially the same viewpoint as Locke, but he lived in the fourth century B.C.
- c. Descartes believed that knowledge does not depend on experience.
9. c. is the answer. (p. 3)
- a. Aristotle was a philosopher in ancient Greece who would have agreed with Locke that knowledge comes from experience.
- b. Plato assumed that character and intelligence are inherited.
- d. Locke believed that the mind is a blank slate at birth.
10. a. is the answer. (p. 11)
- b. The cognitive perspective is concerned with how we encode, process, store, and retrieve information.
- c. The behavioral perspective studies the mechanisms by which observable responses are acquired and changed.
- d. The behavior genetics perspective focuses on the relative contributions of genes and environment to individual differences.
11. d. is the answer. (p. 12)
- a. Behavioral psychologists investigate how learned behaviors are acquired. They generally do not focus on subjective opinions, such as attractiveness.
- b. The evolutionary perspective studies how natural selection favors traits that promote the perpetuation of one's genes.
- c. Cognitive psychologists study the mechanisms of thinking and memory, and generally do not investigate attitudes. Also, because the question specifies that the psychologist is interested in comparing two cultures, d. is the best answer.
12. a. is the answer. (p. 12)
- b. & c. Applied and industrial/organizational psychologists tackle practical problems.
- d. Clinical psychologists (and researchers) focus on treating troubled people.
13. c. is the answer. (p. 13)
- d. Psychiatrists are medical doctors rather than psychologists.
14. a. is the answer. (p. 12)
- c. & d. Psychologists are widely involved in *both* basic and applied research.

15. d. is the answer. (p. 14)
16. c. is the answer. (p. 3)
- a. & b. Bacon emphasized the importance of orderly observation and experimentation, neither of which was a focal point of these early schools of psychology.
- d. This is a research method used by the early structural psychologists, not a scholarly viewpoint.

Matching Items

- | | | |
|--------------|---------------|---------------|
| 1. f (p. 11) | 6. e (p. 11) | 11. i (p. 11) |
| 2. b (p. 12) | 7. a (p. 13) | 12. l (p. 11) |
| 3. k (p. 12) | 8. g (p. 12) | 13. d (p. 4) |
| 4. j (p. 12) | 9. m (p. 12) | 14. n (p. 5) |
| 5. o (p. 11) | 10. c (p. 13) | 15. h (p. 3) |

Progress Test 2

Multiple-Choice Questions

1. a. is the answer. (p. 3)
2. a. is the answer. (p. 3)
- b. & d. John Watson, like many American psychologists during this time, believed that psychology should focus on the study of observable behavior.
- c. Because he pioneered the study of learning, Pavlov focused on observable behavior and would certainly have *disagreed* with this statement.
3. b. is the answer. (p. 4)
4. d. is the answer. (p. 7)
5. a. is the answer. (p. 2)
- b. Psychology is equally involved in basic research.
- c. Psychology's knowledge base is constantly expanding.
- d. Psychology is the *scientific study* of behavior and mental processes.
6. c. is the answer. (p. 6)
7. b. is the answer. (p. 2)
- a. Aristotle believed that all knowledge originates with sensory experience.
- c. Descartes was a philosopher of the seventeenth century.
- d. Simonides was a well-known Greek orator.
8. d. is the answer. (p. 11)

- a. The neuroscience perspective studies the biological bases for a range of psychological phenomena.
- b. The evolutionary perspective studies how natural selection favors traits that promote the perpetuation of one's genes.
- c. The social-cultural perspective is concerned with variations in behavior across situations and cultures.
9. c. is the answer. After earning their M.D. degrees, psychiatrists specialize in the diagnosis and treatment of mental health disorders. (p. 13)
a., b., & d. These psychologists generally earn a Ph.D. rather than an M.D.
10. d. is the answer. The emphasis on change during the life span indicates that Dr. Jones is most likely a developmental psychologist. (p. 12)
a. Clinical psychologists study, assess, and treat people who are psychologically troubled.
b. Personality psychologists study our inner traits.
c. Psychiatrists are medical doctors.
11. c. is the answer. (p. 13)
a. Clinical psychologists study, assess, and treat people with psychological disorders.
b. & d. Personality psychologists and psychiatrists do not usually study people in work situations.
12. c. is the answer. (p. 12)
a. Psychologists who follow the behavioral perspective emphasize observable, external influences on behavior.
b. The evolutionary perspective focuses on how natural selection favors traits that promote the perpetuation of one's genes.
d. The cognitive perspective places emphasis on conscious, rather than unconscious, processes.
13. a. is the answer. (p. 11)
14. a. is the answer. The research is addressing a practical issue. (p. 13)
b. Basic research is aimed at contributing to the base of knowledge in a given field, not at resolving particular practical problems.
c. & d. Clinical and developmental research would focus on issues relating to psychological disorders and life-span changes, respectively.
15. a. is the answer. (p. 15)
b. & c. Although each of these is true, SQ3R is based on the more *general* principle of active learning.
d. In fact, just the opposite is true.
16. a. is the answer. (p. 10)
b. & c. The biopsychosocial approach has nothing to do with the relative importance of basic research and applied research and is equally applicable to both.
d. On the contrary, the biopsychosocial approach is based on the idea that single academic perspectives are often limited.

True-False Items

- | | | |
|----------------|--------------|--------------|
| 1. F (p. 11) | 5. F (p. 11) | 9. T (p. 2) |
| 2. F (p. 3) | 6. F (p. 12) | 10. T (p. 5) |
| 3. T (pp. 2-4) | 7. T (p. 15) | |
| 4. T (p. 10) | 8. F (p. 16) | |

Psychology Applied

Multiple-Choice Questions

1. b. is the answer. (p. 3)
a. As the founder of the first psychology laboratory, Wundt certainly based his research on the scientific method.
c. The earliest psychologists, including Wilhelm Wundt, were concerned with the self-examination of covert thoughts, feelings, and other mental processes.
2. c. is the answer. (p. 4)
3. d. is the answer. (pp. 6-7)
4. c. is the answer. (p. 13)
a. Industrial/organizational psychologists study and advise on behavior in the workplace.
b. Developmental psychologists investigate behavior and mental processes over the life span.
d. Psychiatrists are medical doctors who treat medical disorders. There is no indication that Terrence is suffering from a medical disorder.
5. b. is the answer. (p. 10)
a., c., & d. Each of these perspectives is too narrow to apply to Professor Gutierrez's belief. Moreover, the psychodynamic perspective (a.) emphasizes unconscious processes, which Professor Gutierrez has not expressed a belief in.
6. b. is the answer. Locke believed that all knowledge comes from experience (nurture). Descartes believed that some ideas are innate (nature). (p. 3)
c. & d. The text does not discuss the views of these philosophers regarding this issue.
7. b. is the answer. (p. 2)
a. Psychologists study both overt (observable) behaviors and covert thoughts and feelings.
c. Psychologists' values definitely *do* influence their research.

8. **d.** is the answer. Because both nature and nurture influence most traits and behaviors, the tension surrounding this issue has dissolved. (p. 10)
9. **c.** is the answer. (p. 12)
 - a.** This perspective emphasizes the influences of physiology on behavior.
 - b.** This perspective emphasizes environmental influences on observable behavior.
 - d.** This perspective emphasizes how behavior and thinking vary across situations and cultures.
10. **c.** is the answer. (p. 12)
 - a.** Clinical psychology is concerned with the study and treatment of psychological disorders.
 - b.** Psychiatry is the branch of medicine concerned with the physical diagnosis and treatment of psychological disorders.
 - d.** Industrial/organizational psychologists study behavior in the workplace.
11. **a.** is the answer. (p. 11)
12. **a.** is the answer. (pp. 11–12)
 - b.** Neither perspective places any special emphasis on unconscious processes.
 - c.** Neither perspective emphasizes covert behaviors.
 - d.** Introspection was a research method used by the earliest psychologists, not those working from the cognitive perspective.
13. **c.** is the answer. (p. 12)
 - a.** The text suggests just the opposite: By studying behavior from several perspectives, psychologists gain a fuller understanding.
 - b. & d.** Each perspective is useful in that it calls researchers' attention to different aspects of behavior. This is equally true of those perspectives that do not emphasize objective measurement.
14. **c.** is the answer. (p. 15)
 - a.** To be effective, study must be *active* rather than passive in nature.
 - b.** Most exams are based on lecture *and* textbook material.
 - d.** Cramming hinders retention.
15. **d.** is the answer. (pp. 15–16)
16. **d.** is the answer. James emphasized the adaptive value of our thoughts and behaviors (functionalism). Titchener used the method of introspection to examine the basic contents of the mind (structuralism). (pp. 4, 5)
 - a. & b.** The text does not discuss the views of these psychologists regarding the nature-nurture issue.

Essay Question

A psychologist working from the neuroscience perspective might study the brain circuits and body chemistry that trigger attraction and sexual arousal. A psychologist working from the evolutionary perspective might analyze how love has facilitated the survival of our species. A psychologist working from the behavior genetics perspective might attempt to compare the extent to which the emotion is attributable to our genes and the extent to which it is attributable to our environment. A psychologist working from the psychodynamic perspective might search for evidence that a person's particular emotional feelings are disguised effects of unfulfilled wishes. A psychologist working from the behavioral perspective might study the external stimuli, such as body language, that elicit and reward approach behaviors toward another person. A psychologist working from a cognitive perspective might study how our thought processes, attitudes, and beliefs foster attachment to loved ones, and a psychologist working from a social-cultural perspective might explore situational influences on attraction and how the development and expression of love vary across cultural groups.

Key Terms

1. **Psychology** is the scientific study of behavior and mental processes. (p. 2)
2. **Empiricism** is the twofold view that (a) knowledge comes from experience via the senses (rather than being inborn), and (b) observation and experimentation are the basis of science. (p. 3)
3. Introduced by Edward Bradford Titchener, **structuralism** is the early school of psychology that used self-reflection (introspection) to examine the elemental structure of the mind. (p. 4)
4. Introduced by William James, **functionalism** is the early school of psychology that emphasized how behavior and mental processes enable the organism to adapt, survive, and flourish. (p. 5)
5. **Humanistic psychology** is the branch of psychology that emphasizes the growth potential of healthy people. (p. 7)
6. The **nature-nurture issue** is the controversy over the relative contributions that genes (nature) and experience (nurture) make to the development of psychological traits and behaviors. (p. 9)
7. **Natural selection** is the principle that those traits of a species that contribute to reproduction and survival are most likely to be passed on to succeeding generations. (p. 9)

8. Psychologists analyze behavior and mental processes from differing complementary views, or **levels of analysis**. (p. 10)
9. The **biopsychosocial approach** is an integrated perspective that focuses on biological, psychological, and social-cultural levels of analysis for a given behavior or mental process. (p. 10)
10. **Basic research** is pure science that aims to increase psychology's scientific knowledge base rather than to solve practical problems. (p. 12)
11. **Applied research** is scientific study that aims to solve practical problems. (p. 13)
12. **Counseling psychology** is the branch of psychology that helps people cope with challenges in their daily lives. (p. 13)
13. **Clinical psychology** is the branch of psychology concerned with the study, assessment, and treatment of people with psychological disorders. (p. 13)
14. **Psychiatry** is the branch of medicine concerned with the physical diagnosis and treatment of psychological disorders. (p. 13)

FOCUS ON VOCABULARY AND LANGUAGE

Page 1: Have you ever played *peekaboo* with a 6-month-old . . . ? Peekaboo is a game played in most cultures where a person hides or pretends to hide from a child and then reappears saying "PEEKABOO!" The important question for psychologists is, why do infants all over the world react similarly to this game; what are they actually feeling, perceiving, and thinking?

Page 1: Such questions provide *grist for psychology's mill* The expression "*provide grist for the mill*" derives from the practice in the past where farmers brought their grain (*grist*) to the *mill* (a building with machinery for grinding grain into flour). Today the expression means that a greater volume of work (*grist*) does not present a problem; in fact, it is welcomed. The amount of grain (*grist*) is analogous to the variety of questions asked, and the research conducted to answer them is like the *mill* producing flour from the *grist*. Thus, psychology is a science that thrives on attempting to answer a variety of questions about how we think, feel, and act through scientific methodology (research).

Psychology's Roots

Page 2: Let's *unpack* this definition. *Unpack* here means to take apart or disassemble. So psychology, defined as the science of behavior and mental processes, is broken down into overt behavior (i.e., observable events) and covert processes (i.e., events hidden within, such as thoughts, feelings, perceptions, beliefs, and so on) and is studied using the scientific or empirical method.

Page 2: . . . psychological science welcomes *hunches* and plausible-sounding theories. In popular usage a *hunch* is an intuitive feeling about a situation or event. Psychology can use subjective ideas to help

formulate hypotheses or predictions which can then be tested empirically or scientifically.

Page 3: . . . *down-to-earth* . . . This means to be straightforward and practical. In Britain, scientists such as Francis Bacon (1561–1626) were concerned with experimentation, experience, and common-sense judgment (they took a *down-to-earth* approach).

Page 5: Alas, structuralism *waned* as introspection *waned*. To *wane* means to fade away or to decline in power. Systematic *introspection* (self-reflective analysis of immediate sensations, thoughts, feelings, etc.) was not a reliable scientific method; as its use decreased (*waned*) so too did **structuralism**, the school devoted to finding the basic elements of mind through introspection.

Page 5: . . . *wise-cracking* . . . William James was well-known for joking and making witty remarks (*wise-cracking*) during his lectures on psychology. He also showed great courage (*displayed spunk*) by admitting Mary Calkins into his graduate seminar despite the objections of Harvard's president.

Page 6: This list of pioneering psychologists . . . "*Magellans of the mind*" Ferdinand Magellan (1489–1521) was a famous Portuguese navigator who made many discoveries and explored areas of the world previously unknown to his fellow Europeans. Because early psychologists made exciting discoveries and explored unknown frontiers, they were preparing the way (they were *pioneers*) for future psychologists and can thus be considered "*Magellans of the mind*."

Contemporary Psychology

Page 8: . . . *mushrooming* . . . Membership in psychological societies is growing at a rapid rate (*mushrooming*), and psychology is becoming more and more international (*globalizing*).

Page 9: . . . psychology has *wrestled* with some issues Psychology has struggled (*wrestled*) with a number of debates, the biggest and most enduring of which is the controversy over the relative influence that genes (biology) and environment (experience) have on the development of psychological traits and behaviors (the **nature-nurture issue**).

Page 9: In the 1600s, philosophers *rekindled* the debate [nature-nurture]. *Rekindled* means to restart, as in to restart a fire (*rekindle*). John Locke in the 1600s repeated what Aristotle had said 2000 years before—that humans are born without any knowledge (i.e., that we are blank slates, or blank paper, at birth) and that all knowledge comes from experience (*nurture*). Plato and, later, René Descartes argued that we are born with some innate knowledge (*nature*).

Page 9: The nature-nurture debate *weaves a thread* from the distant past to our time. This simply means that the issue has been of concern to scholars and others from the time of the Greek philosophers right up to modern times. The debate connects the past to the present (*weaves a thread* between the two).

Page 10: Yet over and over again we will see that in contemporary science the nature-nurture *tension dissolves*. The main point is that both sides of the debate have something to offer: Each contributes to the search for the truth. Thus, in modern science the strained relations (*tension*) over this issue diminish (*dissolve*).

Page 11: “*Red in the face*” and “*hot under the collar*” refer to the physical changes that often accompany emotional arousal (e.g., anger). A person’s face may become red due to blood rushing to it (*blushing*), and he or she may feel hot and perspire (*hot under the collar*). Different perspectives (neuroscience, evolutionary, behavior genetics, psychodynamic, behavioral, cognitive, and social-cultural) examine the same event (emotional change) using different levels of analysis. Myers points out that these different perspectives are not necessarily in opposition to each other but, rather, are complementary; that is, each level helps to complete the puzzle of why the event occurs by supplying answers from different points of view (*perspectives*).

Page 12: But there is a *payoff*: Psychology is a *meeting ground* for different disciplines, and is thus a *perfect home* for those with *wide-ranging* interests. Myers points out that there is much diversity in the discipline of psychology (i.e., it lacks unity), but this is beneficial (a *payoff*) because it is a nice place (area) to work in (a *perfect home*) for those who have broad or diverse (*wide-ranging*) interests. Thus, psychology is the ideal meeting place or *meeting ground* for different disciplines.

Page 13: . . . *psychoceramics* (the study of crackpots). This joke derives its humor from the fact that some words or phrases in English have more than one meaning, and it is this “play on words” that makes the joke funny. *Ceramics* is concerned with the work (or art) of making pottery, porcelain, etc. Some of the pots may develop small breaks or splits and consequently would be referred to as “cracked pots.” The term *crackpot*, on the other hand, is a colloquial (informal) expression used to describe a useless, impractical, or even a crazy person. Although psychologists engage in a variety of interdisciplinary studies, such as psychohistory, psycholinguistics, and so on, there is obviously no such thing as “*psychoceramics* (the study of crackpots).” Clinical psychologists, of course, assess and treat mental, emotional, and behavioral disorders (mental illness or psychopathology). (Note that Myers confesses in a footnote that he wrote this sentence on April 1st, April Fools’ Day, which traditionally involves people playing practical jokes on other people. Did he fool you?)

(Close-Up) Your Study of Psychology

Page 15: One of psychology’s oldest findings is that *spaced practice* promotes better retention than *massed practice*. *Spaced practice* refers to studying over a longer period of time, say 2 hours a day over 5 days rather than 10 hours on 1 day (*massed practice* or cramming). Distributing your study time is much better for learning and retention than one long study period (a *blitz*).

