What Is Psychology?

Psychological Science Is Born

**Objective P-1:** Describe some important milestones in psychology’s early development.

1. The Greek naturalist and philosopher _______ developed early theories about _______ and _______.

2. The first psychological laboratory was founded in 1879 by Wilhelm _______. Another psychologist, _______, introduced the school of ________, which explored the basic elements of mind using the method of _________. This method proved _______ (reliable/unreliable).

3. Under the influence of evolutionary theorist Charles Darwin, philosopher-psychologist _______ assumed that thinking developed because it was _______. As a _________, he focused on how mental and behavioral processes enable the organism to adapt and survive. In 1890, he published the first psychology textbook.

4. The first female president of the American Psychological Association was a distinguished memory researcher, _______, who was mentored by _______. The first woman to receive a Ph.D. in psychology was _______, who was the second female APA president and author of *The Animal Mind*.

Psychological Science Develops

**Objective P-2:** Describe how psychology continued to develop from the 1920s through today.

5. In its earliest years, psychology was defined as the science of _______ life. From the 1920s into the 1960s, psychology in America was redefined by _______ and _______ as the science of _______ behavior.

6. The other major force was Freudian psychology, which emphasized the ways our _______ thought processes and our _______ responses to childhood experiences affect our behavior.

7. As a response to Freudian psychology and ________, which they considered too limiting, pioneers _______ and _______ forged _______ psychology. This new perspective emphasized the potential of _______ people.

8. During the 1960s, psychology underwent a _______ revolution as it began to recapture interest in how our _______ processes and retains information. The study of brain activity linked with mental activity is called _______.

9. The text author defines psychology as the scientific study of _______ and _______ processes. In this definition, “behavior” refers to any action that we can _______ and _______, and “mental processes” refers to the internal, _______ _______ we _______ from behavior.

10. As a science, psychology is less a set of findings than a way of _______.

APPLICATIONS:

11. *Psychology* is defined as the “science of behavior and mental processes.” Wilhelm Wundt would have omitted which of the following words from this definition?
   
   a. science
   b. behavior and
   c. and mental processes
   d. Wundt would have agreed with the definition as stated.

12. Jawan believes that psychologists should go back to using introspection as a research tool. This technique is based on
   
   a. survey methodology.
   b. experimentation.
   c. self-examination of mental processes.
   d. the study of observable behavior.
Dharma's term paper on the history of American psychology notes that
a. psychology began as the science of mental life.
b. from the 1920s into the 1960s, psychology was defined as the scientific study of observable behavior.
c. contemporary psychologists study both overt behavior and covert thoughts.
d. all of these statements are true.

During his presentation on the history of psychology, Sanjay notes that Darwin's theory led most directly to the development of the school of
a. structuralism. c. functionalism.
b. behaviorism. d. humanism.

The psychological views of William James are to those of Edward Titchener as __________ is to __________.

a. nature; nurture
b. nurture; nature
c. structuralism; functionalism
d. functionalism; structuralism

In its earliest days, psychology was defined as the
a. science of mental life.
b. study of conscious and unconscious activity.
c. science of observable behavior.
d. science of behavior and mental processes.

Who introduced the early school of structuralism?

a. Edward Titchener
b. Wilhelm Wundt
c. William James
d. Mary Whiton Calkins

The first psychology laboratory was established by __________ in the year __________.

a. Wundt; 1879 c. Freud; 1900
b. James; 1890 d. Watson; 1913

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

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

Who wrote the early textbook Principles of Psychology?

a. Wilhelm Wundt c. Jean Piaget
b. Ivan Pavlov d. William James

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.

Carl Rogers and Abraham Maslow are most closely associated with
a. cognitive psychology.
b. behaviorism.
c. psychodynamic theory.
d. humanistic psychology.

The Greek philosopher who believed that intelligence was inherited was


Today, psychology is defined as the

a. science of mental phenomena.
b. science of conscious and unconscious activity.
c. science of behavior.
d. science of behavior and mental processes.

The historical roots of psychology include the fields of __________ and __________.
31. Some early psychologists included Ivan Pavlov, who pioneered the study of ____________; the personality theorist ____________; and Jean Piaget, who studied _____________.

32. Worldwide, the number of psychologists is ____________ (increasing/decreasing). Thanks to international publications and meetings, psychological science is also _____________.

33. The nature–nurture issue is the controversy over the relative contributions of ____________ and _____________.

34. 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 _____________.

35. In the 1600s, the views of the Greek philosophers were revived by _____________, who believed that the mind is a blank slate on which experience writes, and _____________, who believed that some ideas are innate.

36. In 1859, naturalist ____________ explained species variation by proposing the process of ____________, which works through the principle of _____________.

37. Today’s psychologists explore the relative contributions of biology and experience. How we humans are alike because of our common biology and history is the focus of _____________. How we differ because of our differing genes and environments is the focus of _____________.

38. Although the debate continues, we will see that ____________ works on what ____________ endows and that every ____________ event is simultaneously a ____________ event.

STUDY TIP: The nature–nurture issue is psychology’s biggest and most persistent debate. Psychologists explore the issue by asking, for example, how differences in intelligence, personality, and psychological disorders are influenced by heredity and by environment. Today, contemporary science recognizes that nurture works on what nature endows. Our species is biologically endowed with an enormous capacity to learn and to adapt. Moreover, every psychological event is simultaneously a biological event.

39. The enduring behaviors, ideas, attitudes, values, and traditions of a group of people and transmitted from one generation to the next defines the group’s _____________.

40. Although specific attitudes and behaviors vary across cultures, the underlying ____________ are the same. For instance, throughout the world people diagnosed with ____________ exhibit the same ____________ malfunction. Likewise, similarities between the ____________ far outweigh differences.

41. ____________ scientifically explores human strengths and human flourishing.

APPLICATION:

42. A friend majoring in anthropology is critical of psychological research because it often ignores the influence of culture on thoughts and actions. You point out that

a. there is very little evidence that cultural diversity has a significant effect on specific behaviors and attitudes.

b. most researchers assign participants to experimental and control conditions in such a way as to fairly represent the cultural diversity of the population under study.

c. it is impossible for psychologists to control for every possible variable that might influence research participants.

d. even when specific thoughts and actions vary across cultures, as they often do, the underlying processes are much the same.

Objective P-4: Describe psychology’s levels of analysis and related perspectives.

43. 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 perspectives of biological, __________, and __________, which together form an integrated __________ approach to the study of behavior and mental processes.

44. Psychologists who study how the body and brain enable emotions, memories, and sensory experiences are working from the __________ perspective.

45. 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.

46. Psychologists who believe that behavior springs from unconscious drives and conflicts are working from the __________ perspective.

47. Psychologists who study the mechanisms by which observable responses are acquired and changed are working from the __________ perspective.

48. The __________ perspective explores how we encode, process, store, and retrieve information.

49. Psychologists who study how thinking and behavior vary in different situations are working from the __________ perspective.

50. The different perspectives on the big issues __________ (contradict/complement) one another.

Study tip: This section describes a number of perspectives in psychology. Keep in mind that each perspective is nothing more than how certain psychologists feel behavior and mental processes should be investigated. For example, a clinical psychologist could approach the study of abnormal behavior from any of the perspectives discussed. Typically, however, psychologists work from a combination of perspectives rather than exclusively from only one. To deepen your understanding of the various perspectives, review the following chart. In the first column are listed psychology's contemporary perspectives. In the second column are listed historical roots and the pioneers who contributed to each modern-day perspective and the subfield that derives from it. As you work through the chapters, you might want to annotate this chart to include what you know about these psychologists.

<table>
<thead>
<tr>
<th>Perspective</th>
<th>Historical Roots and Pioneers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuroscience</td>
<td>Aristotle (perception, emotion), Wundt</td>
</tr>
<tr>
<td>Evolutionary</td>
<td>Darwin, Freud</td>
</tr>
<tr>
<td>Behavior Genetics</td>
<td>Darwin</td>
</tr>
<tr>
<td>Psychodynamic</td>
<td>Aristotle (personality), Freud</td>
</tr>
<tr>
<td>Behavioral</td>
<td>Aristotle (learning), Pavlov, Watson, Skinner</td>
</tr>
<tr>
<td>Cognitive</td>
<td>Aristotle (memory), Wundt (quantifying mental processes), Piaget</td>
</tr>
<tr>
<td>Social-Cultural</td>
<td>Piaget, Rogers, Maslow</td>
</tr>
</tbody>
</table>
APPLICATIONS:

51. The philosophical views of John Locke are to those of René Descartes as ______ is to ______.
   a. nature; nurture
   b. nurture; nature
   c. rationality; irrationality
   d. irrationality; rationality

52. 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
   a. psychodynamic perspective.
   b. biopsychosocial approach.
   c. evolutionary perspective.
   d. neuroscience perspective.

53. In concluding her report on the “nature-nurture issue in contemporary psychology,” Karen notes that
   a. most psychologists believe that nature is a more important influence on the development of most human traits.
   b. most psychologists believe that nurture is more influential.
   c. the issue is more heatedly debated than ever before.
   d. nurture works on what nature endows.

54. 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
   b. behavioral
   c. cognitive
   d. social-cultural

55. The psychological perspective that places the MOST emphasis on how observable responses are learned is the perspective.
   a. behavioral
   b. cognitive
   c. behavior genetics
   d. evolutionary

56. 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 ______.
   a. conscious processes; observable responses
   b. unconscious processes; conscious processes
   c. overt behaviors; covert behaviors
   d. introspection; experimentation

57. Concerning the major psychological perspectives on behavior, the text author suggests that
   a. researchers should work within the framework of only one of the perspectives.
   b. only those perspectives that emphasize objective measurement of behavior are useful.
   c. the different perspectives often complement one another; together, they provide a fuller understanding of behavior than provided by any single perspective.
   d. psychologists should avoid all of these traditional perspectives.

Objective P-5: Identify psychology's main subfields.

58. Psychologists may be involved in conducting ______, which builds psychology's knowledge base, or ______, which seeks solutions to practical problems.

59. Psychologists who help people cope with problems in living are called ______ psychologists. Psychologists who study, assess, and treat troubled people are called ______ psychologists.

60. Medical doctors who provide psychotherapy and treat physical causes of psychological disorders are called ______.

61. Psychologists who work to create healthy social and physical environments are called ______.

Objective P-6: Explain how psychological principles can help you learn and remember.

62. Repeated ______ and ______ of material improves retention of information. This phenomenon is called the ______.

63. To master any subject, you must ______ process it.

64. The ______ study method incorporates five steps: a. _______, b. ______, c. _______, d. _______, and e. ______.

List four additional study tips identified in the text.
   a. ______
   b. ______
   c. ______
   d. ______
APPLICATIONS:

65. Terrence wants to talk to a professional to help him cope with some academic challenges he's facing. You recommend that he contact an
   a. industrial-organizational psychologist.
   b. developmental psychologist.
   c. counseling psychologist.
   d. psychiatrist.

66. Dr. Aswad is studying people’s enduring inner traits. Dr. Aswad is most likely a(n)
   a. clinical psychologist.
   b. psychiatrist.
   c. personality psychologist.
   d. industrial-organizational psychologist.

67. Your roommate announces that her schedule permits her to devote three hours to studying for an upcoming quiz. You advise her to
   a. spend most of her time reading and rereading the text material.
   b. focus primarily on her lecture notes.
   c. space study time over several short sessions.
   d. cram for three hours just before the quiz.

68. 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
   a. he is probably overestimating his knowledge of the material.
   b. if he devotes extra time to studying, his retention of the material will be improved.
   c. the more often students test themselves on the material, the better their exam scores.
   d. all of these statements are true.

69. Brad, who prepares for exams simply by reading the textbook assignment several times, evidently has not heard about
   a. functionalism
   b. positive psychology.
   c. the testing effect.
   d. the nature–nurture issue.

SECTION REVIEW:

70. 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

71. The seventeenth-century philosopher who believed that the mind is blank at birth and that most knowledge comes through sensory experience is
   a. Plato.
   b. Aristotle.
   c. René Descartes.
   d. John Locke.

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

73. Psychologists who study the degree to which genes influence our personality are working from the ________ perspective.
   a. behavioral
   b. evolutionary
   c. behavior genetics
   d. neuroscience

74. Which psychological perspective emphasizes the interaction of the brain and body in behavior?
   a. neuroscience
   b. cognitive
   c. behavioral
   d. behavior genetics

75. 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

76. 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.

77. Psychologists who study, assess, and treat troubled people are called
   a. basic researchers.
   b. applied psychologists.
   c. clinical psychologists.
   d. psychiatrists.

78. 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.

79. In order, the sequence of steps in the SQ3R method is
   a. survey, review, retrieve, question, read.
   b. review, question, survey, read, retrieve.
   c. question, review, survey, read, retrieve.
   d. survey, question, read, retrieve, review.
80. Psychologists who study how brain activity is linked to memory, perception, and other thought processes are called
a. humanistic psychologists.
b. psychiatrists.
c. clinical psychologists.
d. cognitive neuroscientists.

81. In defining psychology, the text notes that psychology is most accurately described as a
a. way of asking and answering questions.
b. field engaged in solving applied problems.
c. set of findings related to behavior and mental processes.
d. nonscientific approach to the study of mental disorders.

82. Two historical roots of psychology are the disciplines of
a. philosophy and chemistry.
b. physiology and chemistry.
c. philosophy and biology.
d. philosophy and physics.

83. The way we encode, process, store, and retrieve information is the primary concern of the ________ perspective.
a. neuroscience  c. social-cultural  
b. evolutionary  d. cognitive

84. Which of the following individuals is also a physician?
a. clinical psychologist  
b. experimental psychologist  
c. psychiatrist  
d. biological psychologist

85. 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
a. clinical psychologist.
b. personality psychologist.
c. psychiatrist.
d. developmental psychologist.

86. Which subfield is most directly concerned with studying human behavior in the workplace?
a. clinical psychology  
b. personality psychology  
c. industrial-organizational psychology  
d. psychiatry

87. Dr. Ernst explains behavior in terms of different situations. Dr. Ernst is working from the ________ perspective.
a. behavioral  c. social-cultural  
b. evolutionary  d. cognitive

88. Which perspective emphasizes the learning of observable responses?
a. behavioral  c. neuroscience  
b. social-cultural  d. cognitive

89. A psychologist who studies how worker productivity might be increased by changing office layout is engaged in ________ research.
a. applied  c. clinical  
b. basic  d. developmental

90. A major principle underlying the SQ3R study method is that
a. people learn and remember material best when they actively process it.
b. many students overestimate their mastery of text and lecture material.
c. study time should be spaced over time rather than crammed into one session.
d. overlearning disrupts efficient retention.

91. The biopsychosocial approach emphasizes the importance of
a. different levels of analysis in exploring behavior and mental processes.
b. basic research over pure research.
c. pure research over basic research.
d. having a single academic perspective to guide research.

TERMS AND CONCEPTS TO REMEMBER:
92. nature–nurture issue
93. natural selection
94. evolutionary psychology
95. behavior genetics
96. culture
97. positive psychology
98. levels of analysis
99. biopsychosocial approach
100. basic research
101. applied research
102. counseling psychology
103. clinical psychology
104. psychiatry
Community psychology
Testing effect
SQ3R

Before You Move On

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. positive psychology
14. community psychology
15. behaviorism
16. cognitive neuroscience

Definitions or Descriptions

a. behavior in the workplace
b. how people differ as products of different environments
c. the study of practical problems
d. the scientific study of the strengths and virtues of human functioning
e. the mechanisms by which observable responses are acquired and changed
f. how the body and brain create emotions, memories, and sensations
g. how we encode, process, store, and retrieve information
h. the view that psychology should be an objective science that avoids reference to mental processes
i. how natural selection favors traits that promote the perpetuation of one’s genes
j. the study, assessment, and treatment of troubled people
k. brain activity linked with perception, thinking, memory, and language
l. the disguised effects of unfulfilled wishes and childhood traumas
m. adds to psychology’s knowledge base
n. how people interact with their social environment and how social institutions affect individuals and groups
o. how much genes and environment contribute to individual differences
p. the medical treatment of psychological disorders

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.)
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. Repeated self-testing and rehearsal promotes better retention than rereading.

____ 8. 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. The school of structuralism fell from favor in part because the method of introspection was unreliable.