

Name \_\_\_\_\_

**Chapter 1 – Quick Quiz 1**

1. Sheila's psychology professor uses the term "psychobabble" in class one day. The professor is referring to
  - a. an innate mental module that allows young children to develop language.
  - b. pseudoscience covered by a veneer of psychological language.
  - c. incoherent speech linked by remote associations called word salads.
  - d. a child's first word combinations which omit unnecessary words.
2. Professor King approaches questions about human behavior from a perspective that emphasizes the rewards and punishments that maintain certain specific behaviors. He does not invoke the mind to explain behavior but sticks to what he can observe and measure directly. It is most likely that he accepts which of the following psychological approaches?
  - a. sociocultural
  - b. learning
  - c. cognitive
  - d. psychodynamic
3. According to the psychodynamic perspective, human behavior is understood by
  - a. careful introspection and reflection on sensations and thoughts.
  - b. examining the causes and consequences of behavior.
  - c. looking at inner forces, conflicts, and instincts.
  - d. studying the nervous system and the dynamics of the brain.
4. A difference between basic research and applied research is that
  - a. basic research involves experimentation and applied research involves psychiatry.
  - b. basic research studies physical processes and applied research studies mental processes.
  - c. basic research studies animals and applied research studies humans.
  - d. the goal of basic research is simply to acquire knowledge whereas applied research tries to solve practical problems.
5. The question "Why is this the way it is?" illustrates which of the following critical thinking guidelines?
  - a. avoid emotional reasoning
  - b. don't oversimplify
  - c. tolerate uncertainty
  - d. ask questions and be willing to wonder
6. In the 1970s, a 13-year-old girl was rescued from a small room that she had been locked up in since infancy. Because she had grown up in a world without human speech, researchers studied "Genie's" ability to acquire words, grammar, and pronunciation. This type of research is called
  - a. a case study.
  - b. a representative sample.
  - c. a single-blind study.
  - d. a naturalistic observation.
7. Professor Turner wants to know if physiological changes (e.g., heart rate, skin conductance, etc.) occur when people watch violent movies. The most appropriate method to study this would be
  - a. case study.
  - b. naturalistic observation.
  - c. survey.
  - d. laboratory observation.
8. A negative correlation means that
  - a. high values of one variable are associated with low values of the other.
  - b. high values of one variable are associated with high values of the other.
  - c. low values of one variable are associated with low values of the other.
  - d. there is no relationship between the two variables.
9. A variable that the experimenter manipulates is called a(n)
  - a. coefficient of correlation.
  - b. dependent variable.
  - c. control condition.
  - d. independent variable.

10. Researchers use inferential statistics when they want to
- a. draw inferences about how statistically meaningful a study's results are
  - b. organize and summarize research data.
  - c. combine and analyze data from many studies.
  - d. assess how likely it is that a study's results occurred merely by chance.

## **Chapter 1 – Quick Quiz 1**

### **Answer Key**

1.    b       Rationale: Psychobabble is defined as pseudoscience covered by a veneer of psychological language. It is not based on empirical findings. (Page 4, Factual)
2.    b       Rationale: The learning perspective emphasizes the role of consequences such as reward and punishment in determining our behavior. (Page 7, Conceptual)
3.    c       Rationale: A psychodynamic psychologist will examine internal forces, conflicts, and instincts, believed to be largely unconscious, within an individual mind. (Page 8, Factual)
4.    d       Rationale: Basic research focuses on the acquisition of knowledge, whereas applied research attempts to use that basic knowledge to solve human problems. (Page 9, Factual)
5.    d       Rationale: Critical and creative thinking begins with wondering why. (Pages 12–13, Conceptual)
6.    a       Rationale: This is an example of a case study, a detailed study of one individual. (Page 18, Applied)
7.    d       Rationale: Laboratory observation would be the most efficient method because it would allow for special equipment to measure the physiological changes. (Page 19, Applied)
8.    a       Rationale: Negative correlations indicate that two related variables move in opposite directions, that is, the higher one variable the lower the other is, and vice versa. (Page 22, Factual)
9.    d       Rationale: The independent variable is manipulated by the experimenter. (Pages 24–25, Factual)
10.   b       Rationale: Inferential statistics are procedures that allow researchers to draw inferences (conclusions based on evidence) about how meaningful findings are. (Page 29, Factual)

Name \_\_\_\_\_

## Chapter 1 – Quick Quiz 2

1. The psychology that is studied in this textbook bears little relation to the “pop psych” found in self-help books. In our textbook, the psychological information is based on
  - a. psychoanalytic truths.
  - b. the ideas of prominent authors.
  - c. empirical evidence.
  - d. the most up-to-date theories.
2. Wilhelm Wundt is best known for
  - a. establishing the first psychology laboratory in Leipzig, Germany.
  - b. writing books on ethics and logic.
  - c. establishing phrenology as a science.
  - d. training doctors to treat mental illness.
3. Dr. Lyons studies the impact of societal norms and values on human decision-making behavior. It is most likely that she accepts which of the following psychological approaches?
  - a. sociocultural
  - b. learning
  - c. cognitive
  - d. psychodynamic
4. Dr. Braun has been treating a child with attention deficit-hyperactivity disorder. She decides to write a prescription for Ritalin. Given this information, it is most likely that Dr. Braun is a
  - a. psychiatrist.
  - b. psychoanalyst.
  - c. clinical psychologist.
  - d. school psychologist.
5. Critical thinking may be defined as
  - a. negative thinking when trying to solve a problem.
  - b. using insight to assess claims made by researchers.
  - c. using evidence to make objective judgments.
  - d. detecting emotional cues to find hidden agendas.
6. Which of the following is an advantage of case studies?
  - a. Case studies produce a more detailed picture of an individual than other methods do.
  - b. Information is often missing or hard to interpret.
  - c. An individual case may not be representative of others.
  - d. The observer may have biases that influence which facts are observed and which are ignored.
7. Problems with surveys may include all of the following EXCEPT
  - a. volunteer bias.
  - b. lack of representative samples.
  - c. they are unscientific.
  - d. lack of honesty of participants.
8. Which of the following pairs of variables are likely to be negatively correlated?
  - a. room size and time required to paint walls
  - b. amount of studying and test grade
  - c. value of collectible and the number known to exist
  - d. ocean temperature and the number of people at the beach
9. A controlled test of a hypothesis, in which the researcher manipulates one variable in order to discover its effect on another variable, is called a(n)
  - a. correlational study.
  - b. experiment.
  - c. control condition.
  - d. single-blind study.
10. When Patrick and Mary Anne first got married they agreed to participate in a research project that investigated the happiness of married couples over time. Every five years they complete a survey that indicates their marital satisfaction. It is evident that Patrick and Mary Anne are

- a. participants in a single-blind study.
- b. participants in a longitudinal study.
- c. subjects in a control condition.
- d. subjects in a cross-sectional study.

## **Chapter 1 – Quick Quiz 2**

### **Answer Key**

1. c Rationale: Psychology is based on scientific research and empirical evidence. (Page 4, Conceptual)
2. a Rationale: Wilhelm Wundt is often referred to as the father of modern psychology because he established the first scientific laboratory for the study of psychological phenomena in 1879. (Page 6, Factual)
3. d Rationale: Sociocultural perspective is a psychological approach that emphasizes social and cultural influences on behavior. (Page 8, Conceptual)
4. a Rationale: A psychiatrist is medical doctor who can write prescriptions; the other professionals listed are usually not authorized to do so. (Pages 10–11, Applied)
5. c Rationale: Critical thinking is the ability and willingness to assess claims and make objective judgments on the basis of well-supported reasons and evidence, rather than emotion and anecdote. (Page 12, Factual)
6. a Rationale: All of the other choices are disadvantages, not advantages, of case studies. (Page 18, Conceptual)
7. c Rationale: While surveys can be unscientific, this is not necessarily the case. (Pages 20–21, Factual)
8. d Rationale: Rare collectibles (i.e., few are known to exist) are typically more expensive than ones that are more common. As the number known to exist goes down, the cost goes up. (Pages 22–23, Conceptual)
9. b Rationale: This is a description of an experiment. (Page 24, Factual)
10. b Rationale: In longitudinal studies individuals are followed and periodically reassessed over a period of time. (Page 30, Applied)

# Chapter 1 – What Is Psychology?

## Multiple Choice Questions

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### THE SCIENCE OF PSYCHOLOGY

#### Learning Objectives

- 1.1 How “psychobabble” differs from serious psychology
- 1.2 What’s wrong with psychologists’ nonscientific competitors, such as astrologers and psychics
- 1.3 How and when psychology became a formal discipline
- 1.4 Three early schools of psychology
- 1.5 The five major perspectives in psychology

1. Psychology is defined generally as
- a. the study of behavior and mental processes.
  - b. the study of the mind of humans and other animals.
  - c. the study of mental health and illness.
  - d. the study of the human mind.

**Section: The Science of Psychology**

**Page(s): 4**

**Type: Conceptual**

**Difficulty: Easy**

**Answer: a**

**Rationale: Psychology is the discipline concerned with understanding behavior and mental processes and how they are affected by an organism’s physical state, mental state, and external environment. The other choices are only a part of psychology.**

**% correct 93    a= 93   b= 0   c= 0   d= 7    r = .21**

2. Sheila’s psychology professor uses the term “psychobabble” in class one day. The professor is referring to
- a. an innate mental module that allows young children to develop language.
  - b. pseudoscience covered by a veneer of psychological language.
  - c. incoherent speech linked by remote associations called word salads.
  - d. a child’s first word combinations which omit unnecessary words.

**Section: The Science of Psychology**

**Page(s): 4**

**Type: Factual**

**Difficulty: Easy**

**Answer: b**

**Rationale: Psychobabble is defined as pseudoscience covered by a veneer of psychological language. It is not based on empirical findings.**

3. The psychology that is studied in this textbook bears little relation to the “pop psych” found in self-help books. In our textbook, the psychological information is based on
- a. psychoanalytic truths.
  - b. the ideas of prominent authors.
  - c. empirical evidence.
  - d. the most up-to-date theories.

**Section: The Science of Psychology**

**Page(s): 4**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: c**

**Rationale: Psychology is based on scientific research and empirical evidence.**

4. Empirical findings are those that
- a. rely on observation, experimentation, or measurement.
  - b. characterize an entire set of research data.
  - c. are conducted in a field setting outside of a laboratory.
  - d. compare subjects of different ages at a given time.

**Section: The Science of Psychology**

**Page(s): 4**

**Type: Factual**

**Difficulty: Easy**

**Answer: a**

**Rationale: Empirical findings are gathered by careful observation, experimentation, and measurement.**

5. “Pseudoscience” is different from psychology in that psychology is
- based on rigorous research.
  - a false science.
  - self-help.
  - commonsensical.

**Section: The Science of Psychology**

**Page(s): 4**

**Type: Factual**

**Difficulty: Easy**

**Answer: a**

**Rationale: Psychological research findings are based on evidence gathered by careful observation, experimentation, and measurement.**

6. Graphology, or handwriting analysis, uses precise measurements in order to determine personality characteristics from a sample of one’s handwriting. However, there is little empirical evidence to suggest that graphology is accurate in determining one’s personality from a handwriting sample. Graphology is an example of
- fortune-telling.
  - common sense.
  - pseudoscience.
  - numerology.

**Section: The Science of Psychology**

**Page(s): 4**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: c**

**Rationale: A pseudoscience pretends to be scientific—in this case, the precise measurements taken by graphologists seem scientific—but the accuracy of their findings is not confirmed by empirical research.**

7. Like today’s psychologists, great thinkers throughout history have wanted to describe, predict, understand, and modify behavior. Contemporary psychologists, however, approach these issues in a different way by relying heavily upon
- empirical evidence.
  - anecdotes from personal experience.
  - philosophy.
  - phrenology.

**Section: The Science of Psychology**

**Page(s): 5**

**Type: Factual**

**Difficulty: Easy**

**Answer: a**

**Rationale: Contemporary psychologists rely heavily on empirical evidence, whereas some of the great thinkers of history relied more on observations based on anecdotes or on descriptions of a few individuals.**

8. The brain is the ultimate source of our pleasures and joys as well as our sorrows and pains. According to the text, this knowledge was evident as early as
- 377 B.C.
  - A.D. 420.
  - A.D. 1011.
  - A.D. 1879.

**Section: The Science of Psychology**

**Page(s): 5**

**Type: Factual**

**Difficulty: Moderate**

**Answer: a**

**Rationale: The Greek physician, Hippocrates (c. 460 B.C.–c. 377 B.C.), made this observation.**

9. Phrenology
- is a theory of mind based on anecdotes and individual case studies.
  - is the study of the mind of criminals.
  - is based on the writings of John Locke.
  - is a pseudoscience relating bumps on the head to personality traits.

**Section: The Science of Psychology**

**Page(s): 5–6**

**Type: Factual**

**Difficulty: Easy**

**Answer: d**

**Rationale: Phrenology is a pseudoscientific theory that relates bumps on the head to personality traits.**



10. The first psychological laboratory was officially established in
- the United States.
  - Holland.
  - Germany.
  - China.

**Section: The Science of Psychology**

**Page(s): 6**

**Type: Factual**

**Difficulty: Moderate**

**Answer: c**

**Rationale: The first psychological laboratory was established by Wilhelm Wundt in Germany.**

11. Wilhelm Wundt is best known for
- establishing the first psychology laboratory in Leipzig, Germany.
  - writing books on ethics and logic.
  - establishing phrenology as a science.
  - training doctors to treat mental illness.

**Section: The Science of Psychology**

**Page(s): 6**

**Type: Factual**

**Difficulty: Easy**

**Answer: a**

**Rationale: Wilhelm Wundt is often referred to as the father of modern psychology because he established the first scientific laboratory for the study of psychological phenomena in 1879.**

12. Which school of thought in psychology emphasized the purpose of behavior?
- phrenology
  - structuralism
  - functionalism
  - psychoanalysis

**Section: The Science of Psychology**

**Page(s): 6**

**Type: Factual**

**Difficulty: Easy**

**Answer: c**

**Rationale: Functionalism was an early school of psychology that focused on the function or purpose of behavior.**

**% correct 62 a= 20 b= 7 c= 62 d= 11 r = .56**

13. Several middle-school girls watch their classmates, Jon and Jason, engage in a rough-and-tumble wrestling match. The attention of the girls seems to intensify the boys' play. A psychologist trained in the functionalist school would wonder
- what are the most basic elements of the boys' behavior?
  - do these boys have smaller head bumps devoted to "cautiousness" than most boys?
  - what is the purpose of rough-and-tumble play in the adaptive changes of early adolescence?
  - did these boys experience childhood traumas that unconsciously cause aggression?

**Section: The Science of Psychology**

**Page(s): 6**

**Type: Applied**

**Difficulty: Difficult**

**Answer: c**

**Rationale: Functionalism focuses on the purpose of behavior.**

14. Which school of thought in psychology was influenced by the evolutionary theories of Charles Darwin?
- phrenology
  - cognitive
  - functionalism
  - psychoanalysis

**Section: The Science of Psychology**

**Page(s): 6**

**Type: Factual**

**Difficulty: Moderate**

**Answer: c**

**Rationale: William James and other functionalists were strongly influenced by the theories of Charles Darwin.**

15. Emelyn, a class of 1901 college graduate, wants to pursue a graduate career in psychology in order to study the ways that various actions help a person adapt to the environment. The psychological approach of \_\_\_\_\_ best matches Emelyn's interests.
- Wilhelm Wundt
  - William James

- c. Sigmund Freud
- d. Joseph Gall

**Section: The Science of Psychology**

**Page(s): 6**

**Type: Applied**

**Difficulty: Difficult**

**Answer: b**

**Rationale: William James, a leading functionalist, attempted to explain the purpose of behavior and the way various behaviors allow an organism to adapt to the environment.**

16. An obscure neurologist in Vienna, Austria, came to the conclusion that his patient's symptoms had mental rather than physical causes. From this insight, his broad theory of personality evolved. The neurologist was
- a. Wilhelm Wundt.
  - b. William James.
  - c. Sigmund Freud.
  - d. Joseph Gall.

**Section: The Science of Psychology**

**Page(s): 6**

**Type: Factual**

**Difficulty: Easy**

**Answer: c**

**Rationale: Sigmund Freud, a Viennese neurologist, focused on mental causes of his patient's symptoms.**

**% correct 83 a= 3 b= 3 c= 83 d= 10 r = .35**

17. Which of the following is a theory of personality and a method of psychotherapy emphasizing unconscious motives and conflicts?
- a. functionalism
  - b. phrenology
  - c. trained introspection
  - d. psychoanalysis

**Section: The Science of Psychology**

**Page(s): 6**

**Type: Factual**

**Difficulty: Easy**

**Answer: d**

**Rationale: Psychoanalysis is both a theory of personality and a method of psychotherapy emphasizing the role of the unconscious mind in influencing behavior.**

**% correct 83 a= 3 b= 10 c= 3 d= 83 r = .55**

18. Which school of thought in psychology evolved into an elaborate theory of personality and method of psychotherapy?
- a. phrenology
  - b. introspection
  - c. functionalism
  - d. psychoanalysis

**Section: The Science of Psychology**

**Page(s): 6**

**Type: Factual**

**Difficulty: Moderate**

**Answer: d**

**Rationale: Psychoanalysis is both a theory of personality and a method of psychotherapy emphasizing the role of the unconscious mind in influencing behavior.**

19. Which modern psychological perspective focuses on bodily events and their effects on behavior, feelings, and thoughts?
- a. the biological perspective
  - b. the cognitive perspective
  - c. the evolutionary perspective
  - d. the psychodynamic perspective

**Section: The Science of Psychology**

**Page(s): 6**

**Type: Factual**

**Difficulty: Easy**

**Answer: a**

**Rationale: The biological perspective emphasizes bodily events associated with actions, feelings, and thoughts.**

**% correct 89 a= 89 b=0 c= 4 d= 7 r = .45**

20. Mark has a strong desire to quit smoking. A psychologist from the biological perspective would try to help by
- a. delivering a shock to Mark's wrist just as he inhales.
  - b. probing Mark's unconscious need for oral fulfillment.

- c. finding a drug that reduces Mark's craving by blocking the effect of nicotine on his brain.
- d. emphasizing that smoking is a decision that Mark can control.

**Section: The Science of Psychology**

**Page(s): 6**

**Type: Applied**

**Difficulty: Difficult**

**Answer: c**

**Rationale: The biological perspective emphasizes bodily events, such as the effect of drugs on the nervous system.**

21. Evolutionary psychology is a part of which modern psychological perspective?
- a. the biological perspective
  - b. the cognitive perspective
  - c. the sociocultural perspective
  - d. the psychodynamic perspective

**Section: The Science of Psychology**

**Page(s): 6–7**

**Type: Factual**

**Difficulty: Moderate**

**Answer: a**

**Rationale: Evolutionary psychology is a specialty of the biological perspective.**

22. A(n) \_\_\_\_\_ psychologist studies how genetically influenced behavior that was functional or adaptive during our species' past may be reflected in the present behaviors, mental processes, and traits of modern humans.
- a. cognitive
  - b. psychodynamic
  - c. sociocultural
  - d. evolutionary

**Section: The Science of Psychology**

**Page(s): 6–7**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: d**

**Rationale: An evolutionary psychologist studies how genetically influenced behavior that was functional or adaptive during our past may be reflected in our present behaviors, mental processes, and traits.**

23. Professor King approaches questions about human behavior from a perspective which emphasizes the rewards and punishments that maintain certain specific behaviors. He does not invoke the mind to explain behavior but sticks to what he can observe and measure directly. It is most likely that he accepts which of the following psychological approaches?
- a. sociocultural
  - b. learning
  - c. cognitive
  - d. psychodynamic

**Section: The Science of Psychology**

**Page(s): 7**

**Type: Applied**

**Difficulty: Moderate**

**Answer: b**

**Rationale: The learning perspective emphasizes the role of consequences such as reward and punishment in determining our behavior.**

**% correct 90 a= 6 b= 90 c= 0 d= 3 r = .43**

24. Behaviorism is a part of which modern psychological perspective?
- a. cognitive
  - b. learning
  - c. sociocultural
  - d. psychodynamic

**Section: The Science of Psychology**

**Page(s): 7**

**Type: Factual**

**Difficulty: Easy**

**Answer: b**

**Rationale: Behaviorism is a part of the learning perspective, emphasizing the role of environment and of consequences in determining our behavior.**

25. Dr. Mannisto is a behaviorist who is studying the causes of excessive violence among some hockey players. She is likely to consider whether
- a. the more aggressive players have experienced brain injuries.
  - b. there is a reward for players who engage in excessive violence.

- c. the more aggressive players experienced emotional abuse in childhood.
- d. cultural change has shaped hockey players to become more violent than in the past.

**Section: The Science of Psychology**

**Page(s): 7**

**Type: Applied**

**Difficulty: Difficult**

**Answer: b**

**Rationale: Behaviorism is a part of the learning perspective, emphasizing the role of reward and punishment in determining our behavior.**

26. Dr. Pack is interested in how young children watch their older siblings and then imitate their behavior. Her approach is a combination of behaviorism and research on thoughts, values, and intentions. Dr. Pack is best described as a
- a. social-cognitive learning theorist.
  - b. psychodynamic psychologist.
  - c. sociocultural psychologist.
  - d. cognitive psychologist.

**Section: The Science of Psychology**

**Page(s): 7**

**Type: Applied**

**Difficulty: Difficult**

**Answer: a**

**Rationale: Social-cognitive learning theorists combine elements of behaviorism with research on thoughts, values, and intentions. They believe that people learn not only by adapting their behavior to the environment, but also by imitating others and by thinking about the events happening around them.**

27. Which modern psychological perspective looks at how people reason, solve problems, and understand language?
- a. sociocultural
  - b. learning
  - c. cognitive
  - d. psychodynamic

**Section: The Science of Psychology**

**Page(s): 7**

**Type: Factual**

**Difficulty: Easy**

**Answer: c**

**Rationale: The cognitive perspective emphasizes how people reason, remember, use language, and solve problems.**

**% correct 55 a= 38 b= 7 c= 55 d= 0 r = .41**

28. A psychologist who accepts the cognitive perspective would be most interested in
- a. how punishments and rewards affect behavior.
  - b. different cultural environments.
  - c. unconscious conflicts.
  - d. how people think.

**Section: The Science of Psychology**

**Page(s): 7**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: d**

**Rationale: The cognitive perspective emphasizes what goes on in people's heads (i.e., how people think).**

29. Which modern psychological perspective focuses on how our behavior is influenced by the other people in our environment?
- a. sociocultural
  - b. learning
  - c. cognitive
  - d. psychodynamic

**Section: The Science of Psychology**

**Page(s): 8**

**Type: Factual**

**Difficulty: Easy**

**Answer: a**

**Rationale: The sociocultural perspective focuses on the impact of other people, the social context, and cultural rules on nearly everything we do.**

**% correct 90 a= 90 b= 4 c= 5 d= 0 r = .30**

30. Dr. Lyons studies the impact of societal norms and values on human decision-making behavior. It is most likely that she accepts which of the following psychological approaches?
- a. sociocultural

- b. learning
- c. cognitive
- d. psychodynamic

**Section: The Science of Psychology**

**Page(s): 8**

**Type: Applied**

**Difficulty: Moderate**

**Answer: a**

**Rationale: Sociocultural perspective is a psychological approach that emphasizes social and cultural influences on behavior.**

31. Which modern psychological perspective had its origin in Freud's ideas?

- a. sociocultural
- b. learning
- c. cognitive
- d. psychodynamic

**Section: The Science of Psychology**

**Page(s): 8**

**Type: Factual**

**Difficulty: Easy**

**Answer: d**

**Rationale: The psychodynamic perspective is derived from Freud's original theories.**

32. Which modern psychological perspective emphasizes the role of unconscious influence on behavior?

- a. sociocultural
- b. learning
- c. cognitive
- d. psychodynamic

**Section: The Science of Psychology**

**Page(s): 8**

**Type: Factual**

**Difficulty: Easy**

**Answer: d**

**Rationale: The psychodynamic perspective focuses on unconscious influences on a person's actions.**

**% correct 86 a= 10 b= 3 c= 0 d= 86 r = .22**

33. A \_\_\_\_\_ psychologist will examine the roots of one's personality to uncover unresolved conflicts from one's past.

- a. learning
- b. sociocultural
- c. psychodynamic
- d. biological

**Section: The Science of Psychology**

**Page(s): 8**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: c**

**Rationale: A psychodynamic psychologist will examine the roots of one's personality to uncover unresolved conflicts from one's past.**

34. According to the psychodynamic perspective, human behavior is understood by

- a. careful introspection and reflection on sensations and thoughts.
- b. looking at inner forces, conflicts, and instinctual energy.
- c. examining the causes and consequences of behavior.
- d. studying the nervous system and the dynamics of the brain.

**Section: The Science of Psychology**

**Page(s): 8**

**Type: Factual**

**Difficulty: Moderate**

**Answer: b**

**Rationale: A psychodynamic psychologist will examine internal forces, conflicts, and instinctual energy, believed to be largely unconscious, within an individual mind.**

35. Which is true about psychologists today?

- a. Many do not subscribe to a single perspective, but draw from a variety of approaches.
- b. Most agree that intellectual trends, such as humanism and feminism, have no place in psychology.
- c. There is a great deal of disagreement about basic guidelines on what is and what is not acceptable in psychology.
- d. Most believe that relying on hunches and/or personal belief is an important part of psychology.

**Section: The Science of Psychology**

**Page(s): 8**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: a**

**Rationale:** Not all psychologists feel they must swear allegiance to one approach or another; many draw on what they take to be the best features of diverse schools of thought.

## **WHAT PSYCHOLOGISTS DO**

### **Learning objectives**

**1.6 Why you can't assume that all therapists are psychologists, or that all psychologists are therapists**

**1.7 The three major areas of psychologists' professional activities**

**1.8 The difference between a clinical psychologist and a psychiatrist**

36. Which of the following is true about the professional activities of psychologists?
- a. All psychologists see patients.
  - b. Some psychologists serve as consultants to governments or businesses.
  - c. Psychology researchers are not allowed to do work in nonacademic settings.
  - d. Psychology researchers are not allowed to provide counseling services in a mental health setting.

**Section: What Psychologists Do**

**Page(s): 9**

**Type: Factual**

**Difficulty: Moderate**

**Answer: b**

**Rationale:** Some psychologists conduct research or apply its findings in nonacademic settings such as business, sports, government, law, and the military.

37. A difference between basic research and applied research is that
- a. basic research involves experimentation and applied research involves psychiatry.
  - b. basic research studies physical processes and applied research studies mental processes.
  - c. basic research studies animals and applied research studies humans.
  - d. the goal of basic research is simply to acquire knowledge whereas applied research tries to solve practical problems.

**Section: What Psychologists Do**

**Page(s): 9**

**Type: Factual**

**Difficulty: Easy**

**Answer: d**

**Rationale:** Basic research focuses on the acquisition of knowledge, whereas applied research attempts to use that basic knowledge to solve human problems.

**% correct 97 a= 3 b= 0 c= 0 d= 97 r = .28**

38. \_\_\_\_\_ is the aspect of psychology least recognized and understood by the public.
- a. Research psychology
  - b. Clinical psychology
  - c. Applied psychology
  - d. Educational psychology

**Section: What Psychologists Do**

**Page(s): 9**

**Type: Factual**

**Difficulty: Moderate**

**Answer: a**

**Rationale:** Research psychology is the aspect of psychology least recognized and understood by the public (Benjamin, 2003).

39. The majority of new doctoral degrees in psychology are awarded in the areas of
- a. clinical and counseling psychology.
  - b. industrial and organizational psychology.
  - c. experimental psychology.
  - d. developmental psychology.

**Section: What Psychologists Do**

**Page(s): 10**

**Type: Factual**

**Difficulty: Moderate**

**Answer: a**

**Rationale:** Clinical and counseling psychologists and other practitioners now account for over two-thirds of new psychology doctorates.

40. After Jean completed her graduate work, she was licensed as a clinical psychologist. Her graduate training had focused on professional practice and she completed a literature review rather than a dissertation. Jean's

advanced degree is likely to be a(n)

- a. Ph.D.
- b. Psy.D.
- c. M.D.
- d. Ed.D.

**Section: What Psychologists Do**

**Page(s): 10**

**Type: Factual**

**Difficulty: Moderate**

**Answer: b**

**Rationale: The Psy.D. degree focuses on professional practice and typically does not require a dissertation.**

41. The group of mental health professionals who earn either a Ph.D., Ed.D., or a Psy.D. and then diagnose and treat mild and severe mental and emotional problems are called
- a. marriage, family, and child counselors.
  - b. social worker
  - c. psychoanalysts.
  - d. clinical psychologists.

**Section: What Psychologists Do**

**Page(s): 10–11**

**Type: Factual**

**Difficulty: Easy**

**Answer: d**

**Rationale: Clinical psychologists earn a doctoral degree in psychology and then work as practitioners treating mental and emotional problems.**

42. The term \_\_\_\_\_ is unregulated and so the practitioner may have anything from no degree to an advanced professional degree.
- a. experimental psychologist
  - b. psychotherapist
  - c. psychoanalyst
  - d. clinical psychologist

**Section: What Psychologists Do**

**Page(s): 10–11**

**Type: Factual**

**Difficulty: Easy**

**Answer: b**

**Rationale: The term “psychotherapist” is unregulated and may be used by anyone with or without a specific degree.**

43. This person usually earns an M.D. or a Ph.D., followed by specialized training in one specific type of therapy.
- a. marriage, family, and child counselor
  - b. psychotherapist
  - c. psychoanalyst
  - d. clinical psychologist

**Section: What Psychologists Do**

**Page(s): 10–11**

**Type: Factual**

**Difficulty: Easy**

**Answer: c**

**Rationale: Psychoanalysts typically have either an M.D. or a Ph.D., followed by specific training in the use of psychoanalysis.**

44. Ralph seeks a psychiatrist and begins to realize that
- a. the therapist has a Psy.D.
  - b. the therapist has a Ph.D.
  - c. the therapist is likely to take a biological approach to therapy.
  - d. the therapist may not have a degree at all.

**Section: What Psychologists Do**

**Page(s): 10–11**

**Type: Applied**

**Difficulty: Easy**

**Answer: c**

**Rationale: Because psychiatrists are M.D.s, they typically take a biological approach to treatment.**

45. Dr. Braun has been treating a child with attention deficit-hyperactivity disorder. She decides to write a prescription for Ritalin. Given this information, it is most likely that Dr. Braun is a
- a. psychiatrist.
  - b. psychoanalyst.
  - c. clinical psychologist.

- d. school psychologist.

**Section: What Psychologists Do**

**Page(s): 10–11**

**Type: Applied**

**Difficulty: Moderate**

**Answer: a**

**Rationale: A psychiatrist is medical doctor who can write prescriptions; the other professionals listed are usually not authorized to do so.**

46. Many research psychologists, and some practitioners, are worried that
- psychotherapists are losing their “human touch” by relying too much on psychology’s empirical findings.
  - academic-research psychologists are unschooled in current therapeutic methods of psychology.
  - psychotherapists are unschooled in the research methods and empirical findings of psychology.
  - clinical psychologists are effective therapists in regard to general problems, but tend to avoid treating clients with serious mental disturbances.

**Section: What Psychologists Do**

**Page(s): 11**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: c**

**Rationale: Many research psychologists, and some practitioners, are worried about an increase in the number of counselors and psychotherapists who are unschooled in research methods and the empirical findings of psychology, and who use untested, outdated, or ineffective therapy techniques.**

47. One reason why people in the general public are often confused about what psychologists do is that
- psychologists themselves are often confused about what it means to be a psychologist.
  - psychology has never been established as a real academic field.
  - there is widespread disagreement among psychologists about the proper role for psychologists.
  - there is a wide variety of psychology specialties and roles psychologists can play in the community.

**Section: What Psychologists Do**

**Page(s): 11**

**Type: Conceptual**

**Difficulty: Difficult**

**Answer: d**

**Rationale: The number of different types of psychologists makes it difficult for nonpsychologists to understand what a psychologist is. The other options are all false.**

## **CRITICAL AND SCIENTIFIC THINKING IN PSYCHOLOGY**

### **Learning objectives**

**1.9 What it means to think critically**

**1.10 Why not all opinions are created equal**

**1.11 Eight guidelines for evaluating psychological claims**

**1.12 The nature of a scientific theory**

**1.13 The secret of a good scientific definition**

48. Critical thinking may be defined as
- negative thinking when trying to solve a problem.
  - using insight to assess claims made by researchers.
  - using evidence to make objective judgments.
  - detecting emotional cues to find hidden agendas.

**Section: Critical and Scientific Thinking in Psychology**

**Page(s): 12**

**Type: Factual**

**Difficulty: Easy**

**Answer: c**

**Rationale: Critical thinking is the ability and willingness to assess claims and make objective judgments on the basis of well-supported reasons and evidence, rather than emotion and anecdote.**

**% correct 90 a= 10 b= 0 c= 90 d= 0 r = .21**

49. Critical thinking requires
- creativity in order to construct alternative explanations.
  - the knowledge that all opinions are created equal.
  - using anecdotal evidence to assess claims.
  - soaking up knowledge like a sponge.

**Section: Critical and Scientific Thinking in Psychology**

**Page(s): 12**



**Type: Conceptual**

**Difficulty: Moderate**

**Answer: a**

**Rationale: Critical thinking includes the ability to be creative and constructive, the ability to come up with alternative rationales for events, think of implications of research findings, and apply new knowledge to social and personal problems.**

50. “Can I recall events from my childhood accurately?” This question illustrates which of the following critical thinking guidelines?
- a. avoid emotional reasoning
  - b. don’t oversimplify
  - c. tolerate uncertainty
  - d. ask questions and be willing to wonder

**Section: Critical and Scientific Thinking in Psychology**

**Page(s): 12–13**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: d**

**Rationale: This is an example of asking questions and being willing to wonder, an important basis for critical thinking.**

51. The question “Why is this the way it is?” illustrates which of the following critical thinking guidelines?
- a. avoid emotional reasoning
  - b. don’t oversimplify
  - c. tolerate uncertainty
  - d. ask questions and be willing to wonder

**Section: Critical and Scientific Thinking in Psychology**

**Page(s): 12–13**

**Type: Conceptual**

**Difficulty: Easy**

**Answer: d**

**Rationale: Critical and creative thinking begins with wondering why.**

52. A statement that attempts to describe or explain a given behavior is a(n)
- a. hypothesis.
  - b. operational definition.
  - c. theory.
  - d. norm.

**Section: Critical and Scientific Thinking in Psychology**

**Page(s): 13**

**Type: Factual**

**Difficulty: Easy**

**Answer: a**

**Rationale: A statement that attempts to describe or explain a given behavior is called a hypothesis.**

53. An operational definition is
- a. a statement that attempts to describe or explain a given behavior.
  - b. an organized system of assumptions and principles that purports to explain a set of observations and how they are related.
  - c. a precise definition of a term in a hypothesis, which specifies how it will be observed and measured.
  - d. the principle that a scientific theory must make predictions that are specific enough to be disproved.

**Section: Critical and Scientific Thinking in Psychology**

**Page(s): 13**

**Type: Factual**

**Difficulty: Easy**

**Answer: c**

**Rationale: An operational definition is the precise meaning of a term that specifies the operations for observing and measuring the process or phenomenon being defined.**

54. Margie is trying to define “anxiety” in a way that can be empirically tested. She is attempting to find an appropriate
- a. hypothesis.
  - b. operational definition.
  - c. double-blind study.
  - d. theory.

**Section: Critical and Scientific Thinking in Psychology**

**Page(s): 13**

**Type: Applied**

**Difficulty: Moderate**

**Answer: b**

**Rationale: An operational definition is the precise meaning of a term that specifies the operations for observing and measuring the process or phenomenon being defined.**

55. When someone does research and questions whether the sources of information are reliable before making an important decision, that person is following the critical thinking rule to
- avoid emotional reasoning.
  - be willing to wonder.
  - tolerate uncertainty.
  - examine the evidence.

**Section: Critical and Scientific Thinking in Psychology**

**Page(s): 13–14**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: d**

**Rationale: This is an example of examining the evidence, an important basis for critical thinking.**

56. Critical thinkers try to
- use anecdotes to support their arguments.
  - settle arguments based on emotional convictions.
  - identify unspoken assumptions.
  - look for evidence that confirms their viewpoints.

**Section: Critical and Scientific Thinking in Psychology**

**Page(s): 14**

**Type: Factual**

**Difficulty: Moderate**

**Answer: c**

**Rationale: Critical thinkers try to identify unspoken assumptions and biases, although they do not rely on anecdotes or emotional convictions or look only for evidence that confirms their viewpoints.**

57. Beliefs that are taken for granted are called
- assumptions.
  - traits.
  - reinforcers.
  - archetypes.

**Section: Critical and Scientific Thinking in Psychology**

**Page(s): 14**

**Type: Factual**

**Difficulty: Easy**

**Answer: a**

**Rationale: An assumption is a belief that is taken for granted.**

58. The principle of falsifiability means that
- scientists must be careful not to falsify their results.
  - scientists, as well as people in general, tend to accept false information when it is endorsed by an authority.
  - a scientist must state an idea in such a way that it can be refuted or disproved by counterevidence.
  - theories that have not been proven are considered falsified.

**Section: Critical and Scientific Thinking in Psychology**

**Page(s): 14**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: c**

**Rationale: The principle of falsifiability is defined as the principle that a scientific theory must make predictions that are specific enough to expose the theory to the possibility of disconfirmation.**

59. Dennis believes that women are worse drivers than men. He always notices examples of poor women drivers, but ignores evidence to the contrary, such as poor male drivers or good female drivers. Dennis's behavior is an example of
- the principle of falsifiability.
  - critical thinking.
  - the confirmation bias.
  - oversimplifying.

**Section: Critical and Scientific Thinking in Psychology**

**Page(s): 14**

**Type: Applied**

**Difficulty: Difficult**

**Answer: c**

**Rationale: The confirmation bias is the tendency to look for and accept evidence that supports our pet theories and assumptions and to ignore or reject evidence that contradicts our beliefs.**

60. "I really want to believe that my memory of the day I spent at Disneyland as a preschooler is true, but that doesn't mean that it IS true." This example illustrates which of the following critical thinking guidelines?
- examine the evidence
  - define your terms

- c. don't oversimplify
- d. avoid emotional reasoning

**Section: Critical and Scientific Thinking in Psychology**

**Page(s): 14**

**Type: Applied**

**Difficulty: Moderate**

**Answer: d**

**Rationale: Wanting to believe something is emotional reasoning. The speaker is trying to avoid emotional reasoning.**

61. Which of the following is true about the role of emotion in critical thinking and science?
- a. Emotion has a place in critical thinking.
  - b. Emotional conviction alone can settle arguments.
  - c. Disagreeing with findings that you dislike is always unacceptable.
  - d. Defending unpopular ideas is antiscientific.

**Section: Critical and Scientific Thinking in Psychology**

**Page(s): 14–15**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: a**

**Rationale: Emotion has a place in critical thinking and in science, too. Passionate commitment to a view motivates people to think boldly, to defend unpopular ideas, and to seek evidence for creative new theories.**

62. Randy meets a Californian who grows all her own vegetables and refuses to touch any nonorganic food, and he concludes that Californians are overzealous about nutrition. This type of error illustrates the critical thinking guideline of
- a. don't oversimplify.
  - b. define your terms.
  - c. be willing to wonder.
  - d. ask questions.

**Section: Critical and Scientific Thinking in Psychology**

**Page(s): 15**

**Type: Applied**

**Difficulty: Difficult**

**Answer: a**

**Rationale: This is an example of argument by anecdote or generalizing from a personal experience, a common form of oversimplification. Randy bases his statement on only one anecdote.**

63. Which of the following would be an example of "argument by anecdote"?
- a. "My gut feeling is that this isn't the right time to get married."
  - b. "I know that marriage doesn't work out, because all of my uncles ended up divorced and alone."
  - c. "That is my opinion and nothing is going to change my mind."
  - d. "Evolution is a good explanatory system because it is supported by so much evidence."

**Section: Critical and Scientific Thinking in Psychology**

**Page(s): 15**

**Type: Applied**

**Difficulty: Difficult**

**Answer: b**

**Rationale: This speaker is making a generalization based on the experiences of only a few people, and by doing so is engaging in what is known as argument by anecdote.**

64. In the scientific use of the term, a "theory" is
- a. a statement that attempts to describe or explain a given behavior.
  - b. an organized system of assumptions and principles that purports to explain a set of observations and how they are related.
  - c. a precise definition of a term in a hypothesis, which specifies how it will be observed and measured.
  - d. the principle that a scientific theory must make predictions that are specific enough to be disproved.

**Section: Critical and Scientific Thinking in Psychology**

**Page(s): 15**

**Type: Factual**

**Difficulty: Easy**

**Answer: b**

**Rationale: A theory is an organized system of assumptions and principles that purports to explain a set of observations and how they are related.**

65. Which of the following is NOT one of the eight essential critical-thinking guidelines?
- a. avoid overly complicated explanations
  - b. tolerate uncertainty
  - c. examine the evidence
  - d. avoid emotional reasoning

**Section: Critical and Scientific Thinking in Psychology**

**Page(s): 12–16**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: a**

**Rationale: One of the critical thinking guidelines is to avoid oversimplification, so avoiding overly complicated rationales is wrong. The other choices are correct guidelines to critical thinking.**

**% correct 84 a= 84 b= 6 c= 10 d= 0 r = .53**

66. “My memory of getting knocked down by a wave at Newport Beach could be based on what my parents told me later, not my own recollection.” This example illustrates which of the following critical thinking guidelines?
- a. define your terms
  - b. examine the evidence
  - c. consider other interpretations
  - d. don’t oversimplify

**Section: Critical and Scientific Thinking in Psychology**

**Page(s): 15–16**

**Type: Applied**

**Difficulty: Moderate**

**Answer: c**

**Rationale: This is an example of considering other possible interpretations.**

67. A professor tells his students “Researchers aren’t exactly sure why one member of an identical twin pair develops schizophrenia whereas his twin does not.” This example illustrates which of the following critical thinking guidelines?
- a. tolerate uncertainty
  - b. analyze assumptions and biases
  - c. define your terms
  - d. ask questions and be willing to wonder

**Section: Critical and Scientific Thinking in Psychology**

**Page(s): 16**

**Type: Applied**

**Difficulty: Moderate**

**Answer: a**

**Rationale: At times there is not enough evidence to support a particular rationale so it is necessary to tolerate uncertainty.**

## **DESCRIPTIVE STUDIES: ESTABLISHING THE FACTS**

### **Learning objectives**

**1.14 How participants are selected for psychological studies, and why it matters**

**1.15 The methods psychologists use to describe behavior**

**1.16 The advantages and disadvantages of each descriptive research method**

68. Researchers prefer to select participants who accurately represent the larger population that the researcher is interested in. This type of group is called a(n)
- a. experimental sample.
  - b. single-blind sample.
  - c. significance tests.
  - d. representative sample.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 17**

**Type: Factual**

**Difficulty: Moderate**

**Answer: d**

**Rationale: This is a definition of a representative sample.**

69. Which of the following would be considered a good example of a representative sample of college students in the United States?
- a. a survey given to several rural college classrooms
  - b. a questionnaire mailed to random households in Texas
  - c. a survey given to a diverse population in both urban and rural college classrooms in several states
  - d. volunteers who found your survey on the Internet

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 17**

**Type: Applied**

**Difficulty: Moderate**

**Answer: c**

**Rationale: A representative sample should reflect the larger population that the researcher is interested in.**

70. Research methods that describe behavior, but are not necessarily causal explanations are called

- a. experimental methods.
- b. single-blind studies.
- c. significance tests.
- d. descriptive methods.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 18**

**Type: Factual**

**Difficulty: Easy**

**Answer: d**

**Rationale: This is a definition of descriptive research techniques.**

71. Which of the following is an advantage of case studies?
- a. Case studies produce a more detailed picture of an individual than other methods do.
  - b. Information is often missing or hard to interpret.
  - c. An individual case may not be representative of others.
  - d. The observer may have biases that influence which facts are observed and which are ignored.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 18**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: a**

**Rationale: All of the other choices are disadvantages, not advantages, of case studies.**

**% correct 86 a= 86 b= 10 c= 3 d= 1 r = .30**

72. In the 1970s, a 13-year-old girl was rescued from a small room that she had been locked up in since infancy. Because she had grown up in a world without human speech, researchers studied "Genie's" ability to acquire words, grammar, and pronunciation. This type of research is called
- a. a case study.
  - b. a representative sample.
  - c. a single-blind study.
  - d. a naturalistic observation.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 18**

**Type: Applied**

**Difficulty: Moderate**

**Answer: a**

**Rationale: This is an example of a case study, a detailed study of one individual.**

73. An academic researcher would use the case study method in all of the following situations EXCEPT
- a. when first beginning to study a research topic.
  - b. when practical considerations prevent other methods of gathering information.
  - c. when ethical considerations prevent other methods of gathering information.
  - d. when the purpose of the research is to test a hypothesis.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 18**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: d**

**Rationale: The case study method may result in hypotheses, but is generally not a test of hypotheses.**

74. Dawn is systematically recording behaviors at a nursery school, making sure that she doesn't interfere with the behaviors. Dawn is engaged in
- a. observational research.
  - b. survey research.
  - c. experimental research.
  - d. double-blind research.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 19**

**Type: Applied**

**Difficulty: Easy**

**Answer: a**

**Rationale: This is an example of observational research.**

**% correct 100 a= 100 b= 0 c= 0 d= 0 r = .00**

75. An advantage of observational studies is that
- a. they can provide accurate descriptions of behavior.
  - b. the presence of observers can alter the behavior being observed.
  - c. they can answer questions about cause and effect.
  - d. they allow experimenters to manipulate variables.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 19**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: a**

**Rationale: Observational studies provide good descriptive information. Observer effects are a disadvantage, not an advantage of observational studies and only experiments allow researchers to manipulate variables and determine cause-and-effect relationships.**

76. Professor Turner wants to know if physiological changes (e.g., heart rate, skin conductance, etc.) occur when people watch violent movies. The most appropriate method to study this would be
- a. case study.
  - b. naturalistic observation.
  - c. survey.
  - d. laboratory observation.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 19**

**Type: Applied**

**Difficulty: Difficult**

**Answer: d**

**Rationale: Laboratory observation would be the most efficient method because it would allow for special equipment to measure the physiological changes.**

77. Dr. Littman-Smith is conducting research in Kenya in order to determine the ways that mothers and their toddlers interact throughout the day. It is most likely that she is engaged in
- a. case study research.
  - b. laboratory observation.
  - c. naturalistic observation.
  - d. experimental research.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 19**

**Type: Applied**

**Difficulty: Moderate**

**Answer: c**

**Rationale: Naturalistic observation, or observation in a natural setting, would be most useful in this example.**

78. When researchers visited 32 pubs in one city to study drinking habits, they recorded their observations on napkins and pieces of newspaper. The reason they kept records in this way was
- a. to conduct a double-blind study in each of the pubs.
  - b. to make sure the study had reliability.
  - c. to be able to determine experimenter effects at a later point in time.
  - d. to make sure that their intentions were not obvious to those they were observing.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 19**

**Type: Applied**

**Difficulty: Difficult**

**Answer: d**

**Rationale: In observational research, it is important that the subjects not be aware that they are being observed. Otherwise their behavior may be altered.**

79. Psychologists sometimes prefer to make observations in a laboratory setting rather than a naturalistic setting because
- a. it is better to observe behavior in an artificial environment.
  - b. subjects take their participation seriously in a professional environment.
  - c. a lab allows the researchers to have more control over the situation.
  - d. subjects are less aware they are being observed in a laboratory.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 19**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: c**

**Rationale: In some cases, it is important for researchers to have more control over the environment than they would have in a natural setting.**

80. Procedures used to measure and evaluate personality traits, emotional states, aptitudes, and values are called
- a. laboratory observations.
  - b. psychological tests.
  - c. control conditions.
  - d. field research.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 19**

**Type: Factual**

**Difficulty: Easy**

**Answer: b**

**Rationale:** Tests are used to measure personality traits, emotional states, aptitudes, opinions, values, and other characteristics.

**% correct 90    a= 10   b= 90   c= 0   d= 0    r = .21**

81. Harvey is being assessed in order to measure his beliefs and feelings regarding the next election. It is most likely that the assessment instrument will be a(n)
- a. inferential statistic.
  - b. projective test.
  - c. objective test.
  - d. norm.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 19**

**Type: Applied**

**Difficulty: Moderate**

**Answer: c**

**Rationale:** An objective test would be most appropriate in this situation because Harvey is aware of his beliefs and feelings regarding the upcoming election.

82. Which of the following is NOT a characteristic of a good test?
- a. It is standardized.
  - b. It is reliable.
  - c. It is believable.
  - d. It is valid.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 20**

**Type: Factual**

**Difficulty: Moderate**

**Answer: c**

**Rationale:** Whether a test is believable has no bearing on whether it is a good test.

**% correct 86    a= 0   b= 14   c= 86   d= 0    r = .55**

83. When Haylee takes a personality test, the researcher gives her detailed instructions and plenty of time to complete it. But Tyler takes the same test and is given only vague instructions and a limited amount of time. This procedural difference shows a problem in regard to
- a. validity.
  - b. standardization.
  - c. reliability.
  - d. norms.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 20**

**Type: Applied**

**Difficulty: Moderate**

**Answer: b**

**Rationale:** Standardization means that the test is always given under the same circumstances and with the same instructions.

84. In order to be useful, a test must be reliable, that is, it must
- a. measure what it is designed to measure.
  - b. compare results against established standards of performance.
  - c. produce the same results from one time to the next.
  - d. predict other criteria of the trait in question.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 20**

**Type: Factual**

**Difficulty: Moderate**

**Answer: c**

**Rationale:** To be reliable, a test must produce consistent results.

**% correct 80    a= 14   b= 7   c= 80   d= 0    r = .52**

85. If a test measures what it is supposed to measure it is
- a. reliable.
  - b. valid.
  - c. criterion referenced.
  - d. standardized.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 20**

**Type: Factual**

**Difficulty: Easy**

**Answer: b**

**Rationale:** This is a definition of validity.

% correct 95    a= 5   b= 95   c= 0   d= 0    r = .23

86. When Sandee takes a personality test, she is told that the resulting score is compared to norms, that is, the test
- measures what it is designed to measure.
  - results are compared to established standards of performance.
  - produces the same results from one time to the next.
  - predicts other criteria of the personality trait in question.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 20**

**Type: Applied**

**Difficulty: Moderate**

**Answer: b**

**Rationale: Norms are established standards of performance to which an individual's test score can be compared.**

87. Which descriptive method would be most appropriate for studying attitudes toward stem cell research?
- observation
  - case study
  - survey
  - test

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 20**

**Type: Applied**

**Difficulty: Moderate**

**Answer: c**

**Rationale: Surveys are generally most appropriate for measuring attitudes of large groups of people.**

88. The magazine *Lover's Delight* publishes a survey of its female readers called "The Sex Life of the American Wife." It reports that 87 percent of all wives like to make love in rubber boots. The critical flaw in this research would be
- the fact that the sample is not representative of American wives.
  - the fact that a psychological test, rather than a survey, should have been given.
  - the fact that rubber boots are not equally available in all regions of the country.
  - the fact that "making love" has not been operationally defined.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 20**

**Type: Applied**

**Difficulty: Difficult**

**Answer: a**

**Rationale: Respondents to such a survey would include only readers of the particular magazine and would not be representative of all wives.**

89. Problems with surveys may include all of the following EXCEPT
- volunteer bias.
  - lack of representative samples.
  - they are unscientific.
  - lack of honesty of participants.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 20–21**

**Type: Factual**

**Difficulty: Moderate**

**Answer: c**

**Rationale: While surveys can be unscientific, this is not necessarily the case.**

90. Because the people who are willing to take part in a survey may differ from those who decline to take part, the findings of the survey may not generalize to the entire population. This phenomenon is called
- volunteer bias.
  - volunteer advantage.
  - biased response.
  - unfair response.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 20–21**

**Type: Factual**

**Difficulty: Easy**

**Answer: a**

**Rationale: This phenomenon is called volunteer bias.**

91. The likelihood of lying about a touchy topic on a survey is reduced when respondents
- are paid for their participation in the survey.
  - receive explanations regarding the importance of the survey.



- c. are questioned by a compassionate interviewer.
- d. are guaranteed anonymity.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 21**

**Type: Factual**

**Difficulty: Moderate**

**Answer: d**

**Rationale: The likelihood of lying is reduced when respondents are guaranteed anonymity and allowed to respond in private.**

## **CORRELATIONAL STUDIES: LOOKING FOR RELATIONSHIPS**

### **Learning objectives**

**1.17 What positive and negative correlations signify about the relationship between two variables**

**1.18 Why a correlation does not establish a causal relationship between two variables**

92. A statistical measure of the relationship between two variables is the definition of
- a. correlation.
  - b. relationship coefficient.
  - c. replication.
  - d. an experiment.

**Section: Correlational Studies: Looking for Relationships**

**Page(s): 22**

**Type: Factual**

**Difficulty: Easy**

**Answer: a**

**Rationale: This is a definition of correlation.**

**% correct 89 a= 89 b= 0 c= 0 d= 11 r = .21**

93. Two sets of observations assessing men's educational level and their annual income are compared. Which of the following is the most likely outcome?
- a. The first variable caused the second variable.
  - b. The two variables will be uncorrelated.
  - c. The two variables will be negatively correlated.
  - d. The two variables will be positively correlated.

**Section: Correlational Studies: Looking for Relationships**

**Page(s): 22**

**Type: Applied**

**Difficulty: Moderate**

**Answer: d**

**Rationale: In general, men with more education also earn more, a positive correlation.**

94. A negative correlation means that
- a. high values of one variable are associated with low values of the other.
  - b. high values of one variable are associated with high values of the other.
  - c. low values of one variable are associated with low values of the other.
  - d. there is no relationship between the two variables.

**Section: Correlational Studies: Looking for Relationships**

**Page(s): 22**

**Type: Factual**

**Difficulty: Easy**

**Answer: a**

**Rationale: Negative correlations indicate that two related variables move in opposite directions, that is, the higher one variable the lower the other is, and vice versa.**

**% correct 97 a= 97 b= 3 c= 0 d= 0 r = .21**

95. Julie noticed that the number of hours she sleeps each night is related to the scores she receives on quizzes the next day. As her sleep approaches 8 hours, her quiz scores improve; as her sleep drops to 5 hours, her quiz scores show a similar decline. Julie realizes that
- a. there is a negative correlation between the number of hours she sleeps and her quiz grades.
  - b. there is a positive correlation between the number of hours she sleeps and her quiz grades.
  - c. her low quiz scores are caused by sleep deprivation the night before a quiz.
  - d. she should sleep about 10 hours a night to ensure 100 percent quiz grades.

**Section: Correlational Studies: Looking for Relationships**

**Page(s): 22–23**

**Type: Applied**

**Difficulty: Moderate**

**Answer: b**

**Rationale:** This is an example of a positive correlation. More sleep is associated with higher grades, and vice versa. The relationship may be because sleep deprivation causes poor quiz performance, but this is not necessarily the case.

96. Which of the following pairs of variables are likely to be positively correlated?
- outdoor temperature and hot chocolate sales
  - damage to car and speed at the time of accident
  - the price of a car and the age of a car
  - hours spent watching TV and grade point average

**Section: Correlational Studies: Looking for Relationships**

**Page(s): 22–23**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: b**

**Rationale:** The faster a car is traveling at the time of accident, the more severe the damage is likely to be.

97. Which of the following pairs of variables are likely to be negatively correlated?
- room size and time required to paint walls
  - amount of studying and test grade
  - value of collectible and the number known to exist
  - ocean temperature and the number of people at the beach

**Section: Correlational Studies: Looking for Relationships**

**Page(s): 22–23**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: c**

**Rationale:** Rare collectibles (i.e., few are known to exist) are typically more expensive than ones that are more common. As the number known to exist goes down, the cost goes up.

98. Which of the following pairs of variables are likely to be uncorrelated?
- average income and the incidence of dental disease
  - adult shoe size and IQ scores
  - the price of a car and the age of a car
  - hours spent watching TV and grade point average

**Section: Correlational Studies: Looking for Relationships**

**Page(s): 23**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: b**

**Rationale:** There is no relationship between shoe size and IQ scores.

99. Which of the following statements about the coefficient of correlation is true?
- Positive correlations are meaningful, but negative correlations are not.
  - Negative correlations are weak, but positive correlations are strong.
  - Correlations close to +1.0 or –1.0 are strong, whereas correlations close to 0 are weak.
  - A strong correlation is indicative of a causal relationship between variables.

**Section: Correlational Studies: Looking for Relationships**

**Page(s): 23**

**Type: Factual**

**Difficulty: Easy**

**Answer: c**

**Rationale:** The closer the correlation is to –1.00 or to +1.00, the stronger the correlation, whether positive or negative. A correlation of 0 means there is no correlation at all.

100. The coefficient of correlation conveys
- the size and direction of a relationship between two variables.
  - whether one variable causes the other variable to happen.
  - the unintended changes in a subject's behavior due to the experimenter's cues.
  - whether the principle of falsifiability applies to each variable.

**Section: Correlational Studies: Looking for Relationships**

**Page(s): 23**

**Type: Factual**

**Difficulty: Easy**

**Answer: a**

**Rationale:** The coefficient of correlation gives information about size and direction of relationships, but not cause and effect.

101. Which of the following correlations is the strongest?
- 0.8
  - 0.1
  - +0.5

- d. +0.7

**Section: Correlational Studies: Looking for Relationships**

**Page(s): 23**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: a**

**Rationale: Correlations farther away from 0 (either positive or negative) are stronger. The positive and negative sign only indicates the direction, not the strength of the correlation.**

102. Which of the following correlations is the weakest?

- a. -0.8
- b. 0
- c. +0.1
- d. +0.3

**Section: Correlational Studies: Looking for Relationships**

**Page(s): 23**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: b**

**Rationale: A coefficient of 0 indicates no correlation, therefore it is the weakest.**

103. A correlation coefficient of -1.73 means that

- a. the relationship between the two variables is very strong.
- b. the relationship between the two variables is very weak.
- c. as one variable increases, so does the other.
- d. a calculation error has been made.

**Section: Correlational Studies: Looking for Relationships**

**Page(s): 23**

**Type: Conceptual**

**Difficulty: Difficult**

**Answer: d**

**Rationale: Correlations can only range from -1 to +1, therefore a calculation error has been made.**

**% correct 47 a= 7 b= 47 c= 0 d= 47 r = .41**

104. When two variables are not related, the correlation coefficient will be close to

- a. -10.
- b. -1.
- c. 0.
- d. +1.

**Section: Correlational Studies: Looking for Relationships**

**Page(s): 23**

**Type: Factual**

**Difficulty: Easy**

**Answer: c**

**Rationale: The closer the correlation coefficient is to 0, the weaker the relationship. A correlation coefficient of 0 indicates no relationship.**

105. The link between \_\_\_\_\_ is a good example of an illusory correlation.

- a. smoking and lung cancer
- b. vaccines and autism
- c. TV watching and grades
- d. all negative correlations

**Section: Correlational Studies: Looking for Relationships**

**Page(s): 23**

**Type: Factual**

**Difficulty: Moderate**

**Answer: b**

**Rationale: The alleged link between vaccines and autism is an illusory correlation, a result of the fact that most symptoms of childhood autism emerge at about the same time that children are vaccinated.**

106. Shannon reads in a news magazine that people who are chronically depressed are more likely than nondepressed people to develop cancer. From this article, Shannon would be able to determine that

- a. chronic depression causes cancer.
- b. early, undetected cancer causes depression.
- c. depressed people tend to smoke, causing cancer.
- d. chronic depression and cancer are related to one another.

**Section: Correlational Studies: Looking for Relationships**

**Page(s): 23**

**Type: Applied**

**Difficulty: Difficult**

**Answer: d**

**Rationale: Correlations tells us about relationships, but not causal relationships.**

107. The higher a male monkey's level of the hormone testosterone, the more aggressive he is likely to be. This means that
- testosterone and aggression are correlated.
  - testosterone and aggression are uncorrelated.
  - testosterone causes aggression.
  - acting aggressively raises testosterone levels.

**Section: Correlational Studies: Looking for Relationships**

**Page(s): 23**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: a**

**Rationale: Correlations indicate strength and direction of relationships, but do not indicate cause and effect.**

**This is an example of a positive correlation.**

108. The hotter the weather, the more muggings tend to occur. This means that
- hot temperatures make people edgy and cause them to commit crimes.
  - potential victims are more plentiful when the weather warms up.
  - criminals may find it more comfortable to commit crimes in warm weather.
  - Any of these explanations is a possibility.

**Section: Correlational Studies: Looking for Relationships**

**Page(s): 23**

**Type: Conceptual**

**Difficulty: Easy**

**Answer: d**

**Rationale: Any of the explanations is a possibility, but a correlation cannot indicate which one is true.**

109. Why can it be difficult to interpret a correlation between two variables?
- Correlation does not establish a relationship.
  - A correlation does not establish causation.
  - Most correlations are illusory.
  - Most correlations are negative.

**Section: Correlational Studies: Looking for Relationships**

**Page(s): 23**

**Type: Conceptual**

**Difficulty: Easy**

**Answer: b**

**Rationale: Even when correlations are meaningful and strong, they can be hard to interpret because a correlation does not establish causation.**

## **THE EXPERIMENT: HUNTING FOR CAUSES**

### **Learning objectives**

**1.19 Why psychologists rely so heavily on experiments**

**1.20 What control groups are for**

**1.21 Who is "blind" in single- and double-blind experiments, and what they are not supposed to "see"**

110. A controlled test of a hypothesis, in which the researcher manipulates one variable in order to discover its effect on another variable, is called a(n)
- correlational study.
  - experiment.
  - control condition.
  - single-blind study.

**Section: The Experiment: Hunting for Causes**

**Page(s): 24**

**Type: Factual**

**Difficulty: Easy**

**Answer: b**

**Rationale: This is a description of an experiment.**

**% correct 97 a= 3 b= 97 c= 0 d= 0 r = .21**

111. Experiments are more valuable than other research methods because
- they are conducted in labs where the researcher is able to control variables.
  - they can determine correlations.
  - they require informed consent.
  - they allow a determination of cause-and-effect relationships.

**Section: The Experiment: Hunting for Causes**

**Page(s): 24**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: d**

**Rationale: Experiments are the only method that allows a determination of cause and effect.**

112. Which of the following terms refers to the idea that people who participate in research studies must do so voluntarily and must be given enough information to make an intelligent decision about whether to participate?
- validity
  - experimental clarification
  - informed consent
  - the basic research ethic

**Section: The Experiment: Hunting for Causes**

**Page(s): 24**

**Type: Factual**

**Difficulty: Easy**

**Answer: c**

**Rationale: Informed consent refers to the fact that participants must be adequately informed about a research project before they agree to participate.**

113. Which of the following is true regarding the use of animals in psychological research?
- They must give informed consent before being used.
  - They are no longer used in psychological research.
  - Federal regulations governing their housing and care have been strengthened.
  - The American Psychological Association objects to their use.

**Section: The Experiment: Hunting for Causes**

**Page(s): 24**

**Type: Factual**

**Difficulty: Easy**

**Answer: c**

**Rationale: The American Psychological Association's guidelines for using animals in research have been made more comprehensive, and federal regulations governing the housing and care of animals have been strengthened. Informed consent only applies to human subjects.**

114. A variable that the experimenter manipulates is called a(n)
- coefficient of correlation.
  - dependent variable.
  - control condition.
  - independent variable.

**Section: The Experiment: Hunting for Causes**

**Page(s): 25**

**Type: Factual**

**Difficulty: Easy**

**Answer: d**

**Rationale: The independent variable is manipulated by the experimenter.**

**% correct 90 a= 0 b= 5 c= 5 d= 90 r = .30**

115. A variable that the experimenter predicts will be affected by her manipulations is called a(n)
- coefficient of correlation.
  - dependent variable.
  - control condition.
  - independent variable.

**Section: The Experiment: Hunting for Causes**

**Page(s): 25**

**Type: Factual**

**Difficulty: Easy**

**Answer: b**

**Rationale: The dependent variable is a measure of the outcome of an experiment.**

**% correct 93 a= 3 b= 93 c= 3 d= 0 r = .24**

116. A research hypothesis proposes that consuming low-carbohydrate diets results in increased weight loss. One group of people follows a low-carb diet for three weeks, while a second group follows a high-carb diet containing the same number of calories for three weeks. The average number of pounds lost per person is compared. What is the dependent variable?
- number of pounds lost
  - length of time on the diet
  - the amount of carbs in each diet
  - the number of calories in each diet

**Section: The Experiment: Hunting for Causes**

**Page(s): 24–25**

**Type: Applied**

**Difficulty: Moderate**

**Answer: a**

**Rationale: The dependent variable is the variable that is predicted to be affected by manipulations of the independent variable. In this example, the amount of weight loss is predicted to be affected by the different diets.**

117. A researcher wants to know whether eating chocolate makes people nervous. Some participants are given two bars of chocolate to eat and some are given no chocolate at all and then all of the subjects are tested for nervousness an hour later. In this experiment, the amount of chocolate eaten
- would be a dependent variable.
  - would be a placebo.
  - would be an independent variable.
  - may be either an independent or dependent variable.

**Section: The Experiment: Hunting for Causes**

**Type: Applied**

**Difficulty: Moderate**

**Page(s): 24–25**

**Answer: c**

**Rationale: Independent variables are manipulated by the experimenter.**

118. A researcher plans to conduct an experiment to test whether a cup of hot milk at night helps people fall asleep faster than usual. In this study, the independent variable is
- the amount of time it takes participants to fall asleep.
  - the consumption of hot milk at bedtime.
  - the number of participants drinking hot milk at bedtime.
  - the number of hours each participant sleeps for.

**Section: The Experiment: Hunting for Causes**

**Type: Applied**

**Difficulty: Moderate**

**Page(s): 24–25**

**Answer: b**

**Rationale: The independent variable, hot milk, is manipulated by the experimenter. The researcher in this scenario would give hot milk to some people and not to others.**

119. Experiments are specifically designed in order to determine if the
- independent variable affects the dependent variable.
  - dependent variable affects the independent variable.
  - independent variable is correlated with the dependent variable.
  - independent variable and the dependent variable are affected by random assignment.

**Section: The Experiment: Hunting for Causes**

**Type: Conceptual**

**Difficulty: Moderate**

**Page(s): 24–25**

**Answer: a**

**Rationale: Experiments are designed to test whether manipulating the independent variable causes a change in the dependent variable.**

120. Every experiment has \_\_\_\_\_ dependent variable(s).
- zero
  - exactly one
  - one or more
  - more than one

**Section: The Experiment: Hunting for Causes**

**Type: Factual**

**Difficulty: Moderate**

**Page(s): 25**

**Answer: c**

**Rationale: Every experiment has at least one independent and one dependent variable.**

121. Ideally, the \_\_\_\_\_ is the only thing that is not held constant for all participants in an experiment.
- inferential statistic
  - coefficient of correlation
  - independent variable
  - hypothesis

**Section: The Experiment: Hunting for Causes**

**Type: Conceptual**

**Difficulty: Moderate**

**Page(s): 25**

**Answer: c**

**Rationale: The only difference between experimental and control groups should be the independent variable.**

122. The \_\_\_\_\_ in an experiment is a comparison condition in which subjects are not exposed to the same treatment as in the experimental condition.
- double-blind condition
  - control condition
  - single-blind condition
  - criterion validity

**Section: The Experiment: Hunting for Causes**

**Page(s): 25**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: b**

**Rationale: This is a description of a control group.**

**% correct 62 a= 35 b= 62 c= 0 d= 3 r = .27**

123. Subjects are randomly assigned to the experimental or control condition
- to make sure the two groups are equivalent.
  - to eliminate the placebo effect.
  - to control for possible correlations between the independent and dependent variables.
  - to control for experimenter effects.

**Section: The Experiment: Hunting for Causes**

**Page(s): 25–26**

**Type: Conceptual**

**Difficulty: Difficult**

**Answer: a**

**Rationale: Random assignment helps to eliminate differences between groups.**

**% correct 31 a= 31 b= 7 c= 34 d= 28 r = .32**

124. Professor Villanueva has developed a new form of therapy that he believes reduces anxiety. He bases his claim on the fact that 63 percent of the people who go through his program show little to no anxiety after treatment. Why might a scientist be skeptical of his claim?
- There is no control group to compare to the people in his program.
  - He lacks a well-developed hypothesis.
  - Over 30 percent of the people did not improve.
  - The professor conducted an experiment when he should have done a laboratory observation.

**Section: The Experiment: Hunting for Causes**

**Page(s): 25–26**

**Type: Applied**

**Difficulty: Difficult**

**Answer: a**

**Rationale: Experiments usually require both an experimental condition and a comparison or control condition. In this example, it is unclear how many people would show little to no anxiety without the therapy.**

125. In an experiment that tests the effects of exposure to violent television on aggressive behavior, 30 participants view violent programming for 2 hours. Thirty additional participants view nonviolent programming for 2 hours. All participants are then given an aggression questionnaire to complete. Individuals who viewed nonviolent television are part of the
- dependent variable.
  - control group.
  - experimental group.
  - experimenter effects.

**Section: The Experiment: Hunting for Causes**

**Page(s): 25–26**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: b**

**Rationale: The control group in an experiment is a comparison condition in which subjects are not exposed to the same treatment as are those in the experimental condition.**

126. The main reason why researchers use random assignment is
- to be fair to participants.
  - to make sure that the behavior you are interested in would not have occurred anyway, even without your manipulation.
  - to remove the possibility of experimenter effects.
  - to start out with all of the groups being roughly the same.

**Section: The Experiment: Hunting for Causes**

**Page(s): 25–26**

**Type: Conceptual**

**Difficulty: Difficult**

**Answer: d**

**Rationale: If there are enough participants in a study, individual characteristics that could possibly affect the results are likely to be roughly balanced between groups.**

127. A researcher needs to randomly assign participants to either the experimental or the control group. Which of the following techniques would be best to use?
- Assign participants 30 and older to the experimental group and the rest to the control group.
  - Have the participants choose numbers out of a hat; assign those with even numbers in the experimental group and those with odd numbers in the control group.
  - Assign participants with college degrees to the experimental group and the rest to the control group.
  - Have participants decide which group they would like to be in.

**Section: The Experiment: Hunting for Causes**

**Page(s): 26**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: b**

**Rationale: Random assignment is accomplished when each subject has the same probability as any other of being assigned to a given group.**

128. Researchers are studying the effects of nicotine on driving. The participants are divided into two groups. One group is provided with nicotine cigarettes and the other with fake cigarettes that taste and smell like real cigarettes but do not contain nicotine. The fake cigarettes are an example of a(n)
- dependent variable.
  - experimental group.
  - placebo.
  - random assignment.

**Section: The Experiment: Hunting for Causes**

**Page(s): 26**

**Type: Applied**

**Difficulty: Moderate**

**Answer: c**

**Rationale: A placebo is an inactive substance or fake treatment used as a control in an experiment.**

129. An experiment is conducted to test a new antianxiety drug. After taking the drug, 35 percent of the participants receiving the medication report less anxiety, compared to 36 percent of those taking a placebo. The researchers should conclude that
- participants knew which group they were in.
  - the medication itself probably has no real effect on anxiety.
  - the placebo is a better medication than the drug.
  - the drug is an effective treatment for anxiety.

**Section: The Experiment: Hunting for Causes**

**Page(s): 26**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: a**

**Rationale: If a placebo produces approximately the same result as the drug, the reason must be the participants' expectations rather than the treatment itself.**

130. The participants for an experiment are randomly assigned to either the experimental or control group. While the researchers know which group each participant has been assigned to, the participants do not know if they are in the experimental or control group. Which type of study is this an example of?
- single-blind
  - correlational
  - field research
  - double-blind

**Section: The Experiment: Hunting for Causes**

**Page(s): 26**

**Type: Applied**

**Difficulty: Moderate**

**Answer: a**

**Rationale: An experiment in which the participants do not know which group they are in is called a single-blind study.**

131. Unintended changes in subjects' behavior due to cues inadvertently given by the experimenter are called
- replications.
  - experimenter effects.
  - volunteer biases.
  - single-blind studies.

**Section: The Experiment: Hunting for Causes**

**Page(s): 26**

**Type: Factual**

**Difficulty: Easy**

**Answer: b**

**Rationale: This is a definition of experimenter effects.**



% correct 89    a= 3   b= 89   c= 5   d= 0    r = .50

132. Maureen is a psychology major who is conducting a study on memory. The participants in her experiment study a long list of words and are then shown words and asked if they were on the list. Maureen knows which words were on the list, and whenever a participant starts to give a wrong answer, Maureen inadvertently shifts her eyes. As a result, some participants quickly change their answer. This scenario illustrates a(n)
- placebo effect.
  - double-blind study.
  - experimenter effect.
  - correlation coefficient.

**Section: The Experiment: Hunting for Causes**

**Page(s): 26**

**Type: Applied**

**Difficulty: Moderate**

**Answer: c**

**Rationale: The unintended effect of cues inadvertently given by the experimenter on a subject's behavior is known as the experimenter effect.**

133. Noriko is a participant in an experiment to test whether placing magnets inside the soles of shoes reduces foot pain. Neither Noriko nor the experimenter who interacts with her knows whether the pair of shoes she was given have magnets inside of them. Noriko is taking part in a(n)
- correlational study.
  - single-blind study.
  - double-blind study.
  - observational study.

**Section: The Experiment: Hunting for Causes**

**Page(s): 26**

**Type: Applied**

**Difficulty: Moderate**

**Answer: c**

**Rationale: An experiment in which neither the experimenter nor the participants know which subjects are in the experimental or control group is called a double-blind study.**

134. The main advantage of a \_\_\_\_\_ study is that the results cannot be influenced by the expectations of either the participants or the experimenters.
- correlational
  - single-blind
  - double-blind
  - observational

**Section: The Experiment: Hunting for Causes**

**Page(s): 26**

**Type: Conceptual**

**Difficulty: Easy**

**Answer: c**

**Rationale: In a double-blind study, neither the experimenter nor the participants know which subjects are in the experimental or control group. This prevents the expectations of both the participants and the experimenters from affecting the results.**

135. One common disadvantage for experimental studies is that they
- cannot identify cause and effect.
  - often involve situations that are unlike real life.
  - do not allow firm conclusions to be drawn.
  - may be missing vital information due to subjects' inaccurate memories.

**Section: The Experiment: Hunting for Causes**

**Page(s): 27**

**Type: Factual**

**Difficulty: Moderate**

**Answer: b**

**Rationale: The more control researchers exercise over an experiment, the more unlike real life it may become.**

136. Field research sometimes may yield better results than laboratory research because
- placebos don't need to be used.
  - variables can more easily be controlled.
  - there is no control group.
  - the situation is less artificial.

**Section: The Experiment: Hunting for Causes**

**Page(s): 27**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: d**

**Rationale: Field research occurs in natural contexts and involves less artificial situations.**

## **EVALUATING THE FINDINGS**

### **Learning objectives**

**1.22 Why averages can be misleading**

**1.23 How to tell whether a finding is strong or trivial**

**1.24 Why some findings are statistically significant yet unimportant in practical terms**

**1.25 How psychologists can combine results from many studies to better understand the problem**

137. Researchers use descriptive statistics when they want to
- draw inferences about how statistically meaningful a study's results are.
  - organize and summarize research data.
  - combine and analyze data from many studies.
  - assess how likely it is that a study's results occurred merely by chance.

**Section: Evaluating the Findings**

**Page(s): 29**

**Type: Factual**

**Difficulty: Easy**

**Answer: b**

**Rationale: Descriptive statistics are procedures that organize and summarize research data.**

138. A statistician adds all of the test scores for a group of participants and then divides the sum by the number of participants. The result of his calculation is the \_\_\_\_\_ of the test scores.
- arithmetic mean
  - effect size
  - significance test
  - standard deviation

**Section: Evaluating the Findings**

**Page(s): 29**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: a**

**Rationale: The arithmetic mean is calculated by adding up all the individual scores and dividing the result by the number of scores.**

139. When Oliver finds out that the average score on the psychology test was 91 percent correct, he assumes that everyone in the class did well on the test. What is the problem with his conclusion?
- Average scores are meaningless.
  - Every class has students that perform poorly on tests.
  - Averages can be misleading if you don't know how spread out the scores are and how they are distributed.
  - He needs to use inferential statistics to confirm that everyone in the class had a high score.

**Section: Evaluating the Findings**

**Page(s): 29**

**Type: Applied**

**Difficulty: Moderate**

**Answer: c**

**Rationale: Averages can be misleading if you don't know the extent to which events deviated from the statistical mean and how they were distributed.**

140. A researcher is studying the amount of sleep college students get each night. She notices that there is a lot of variability in the data, with some students typically sleeping for around 8 hours a night and some sleeping around 5 hours a night. One way to measure how spread out the data scores are is to use
- the arithmetic mean.
  - meta-analysis.
  - inferential statistics.
  - the standard deviation.

**Section: Evaluating the Findings**

**Page(s): 29**

**Type: Applied**

**Difficulty: Moderate**

**Answer: d**

**Rationale: A standard deviation is defined as a commonly used measure of variability that indicates the average difference between scores in a distribution and their mean.**

141. A business owner records the amount of money each customer spends in her shop. Each month, she calculates the standard deviation for these sales in order to

- a. draw inferences about how statistically meaningful the data is.
- b. determine the average amount each customer spends.
- c. determine how clustered or spread out the individual amounts are around the average sale.
- d. calculate the total amount of money she earned.

**Section: Evaluating the Findings**

**Page(s): 29**

**Type: Applied**

**Difficulty: Difficult**

**Answer: c**

**Rationale: The standard deviation tells us how clustered or spread out the individual scores are around the mean.**

142. Researchers use inferential statistics when they want to

- a. draw inferences about how statistically meaningful a study's results are.
- b. organize and summarize research data.
- c. combine and analyze data from many studies.
- d. assess how likely it is that a study's results occurred merely by chance.

**Section: Evaluating the Findings**

**Page(s): 29**

**Type: Factual**

**Difficulty: Easy**

**Answer: a**

**Rationale: Inferential statistics are procedures that allow researchers to draw inferences (conclusions based on evidence) about how meaningful findings are.**

143. Psychologists typically consider a result to be significant if it would be expected to occur by chance \_\_\_\_\_ time(s) in 100 repetitions of the study.

- a. exactly one
- b. five or fewer
- c. ten or fewer
- d. fifteen or fewer

**Section: Evaluating the Findings**

**Page(s): 29**

**Type: Factual**

**Difficulty: Moderate**

**Answer: b**

**Rationale: The most common criterion for significance is a probability less than 5 times in 100 repetitions.**

144. A psychologist is studying gender relationships in childhood and early adolescence. Fourth grade and sixth grade children are observed during lunchtime at a school in order to compare the seating preferences of boys and girls at the two different ages. From this information, it is evident that the researcher is

- a. conducting a cross-sectional study.
- b. conducting a longitudinal study.
- c. performing a meta-analysis procedure.
- d. performing a significance test.

**Section: Evaluating the Findings**

**Page(s): 30**

**Type: Applied**

**Difficulty: Moderate**

**Answer: a**

**Rationale: Cross-sectional studies compare subjects of different ages at the same time.**

145. When Patrick and Mary Anne first got married they agreed to participate in a research project that investigated the happiness of married couples over time. Every five years they complete a survey that indicates their marital satisfaction. It is evident that Patrick and Mary Anne are

- a. participants in a single-blind study.
- b. participants in a longitudinal study.
- c. subjects in a control condition.
- d. subjects in a cross-sectional study.

**Section: Evaluating the Findings**

**Page(s): 30**

**Type: Applied**

**Difficulty: Moderate**

**Answer: b**

**Rationale: In longitudinal studies individuals are followed and periodically reassessed over a period of time.**

146. Unlike cross-sectional studies, in longitudinal studies participants

- a. in different groups are compared at the same time.

- b. all have them same scores.
- c. are followed over a period of time.
- d. are from different generations.

**Section: Evaluating the Findings**

**Page(s): 30**

**Type: Conceptual**

**Difficulty: Difficult**

**Answer: c**

**Rationale: In longitudinal studies individuals are followed and periodically reassessed over a period of time. Cross-sectional studies compare subjects of different ages at the same time.**

147. Given the differences between cross-sectional and longitudinal studies, a major drawback of longitudinal studies is that

- a. they can take decades to complete.
- b. they are biased.
- c. they measure generational differences.
- d. they are difficult to interpret.

**Section: Evaluating the Findings**

**Page(s): 30–31**

**Type: Conceptual**

**Difficulty: Moderate**

**Answer: a**

**Rationale: In longitudinal studies individuals are followed and periodically reassessed over a period of time. This can take many years to complete.**

148. Two separate studies investigated the relationship between age and religiousness. A cross-sectional study found that older Americans were more religious, but a longitudinal study found no relationship between the participants' ages and their religiousness. This difference is most likely because

- a. longitudinal studies measure generational differences.
- b. cross-sectional studies measure generational differences.
- c. one of the studies was poorly conducted.
- d. the results of one of the studies was misinterpreted.

**Section: Evaluating the Findings**

**Page(s): 31**

**Type: Applied**

**Difficulty: Difficult**

**Answer: b**

**Rationale: Because cross-sectional studies compare individuals of different ages at a given time, generational differences can affect the results. This is not the case with longitudinal studies.**

149. Which of the following statements is true?

- a. Many scholarly journals discourage publishing the effect size of results because it can be misleading.
- b. If the results of a study are not statistically significant, it should not be followed up on.
- c. Results may be statistically significant, yet may be small and of little consequence in everyday life.
- d. Effect size is always large when the results are statistically significant.

**Section: Evaluating the Findings**

**Page(s): 31**

**Type: Conceptual**

**Difficulty: Difficult**

**Answer: c**

**Rationale: A result may be statistically significant at the .05 level, yet may be small and of little consequence in everyday life because the independent variable does not explain most of the variation in people's behavior.**

150. Techniques such as meta-analysis are useful in psychology because

- a. they help reduce unintended changes in subjects' behavior due to cues given by the experimenter.
- b. they allow for the careful study of behavior in schools, workplaces, and other natural contexts.
- c. they include subjects who are exposed to experimental conditions that do not include the independent variable.
- d. rarely does one study prove anything and this technique analyzes data from many studies.

**Section: Evaluating the Findings**

**Page(s): 31**

**Type: Factual**

**Difficulty: Moderate**

**Answer: d**

**Rationale: Meta-analysis allows the results of many studies to be combined. Thus the results are more meaningful than the results of one small study.**

## **True-False Questions**

1. Empirical evidence is evidence gathered by careful reflection on personal experiences.

**Section: The Science of Psychology**

**Type: Factual**

**Page(s): 4**

**Answer: False**

**Rationale: Empirical evidence is evidence gathered by careful observation, experimentation, and measurement.**

2. The psychology that you study in the textbook closely resembles the popular psychology found in self-help books.

**Section: The Science of Psychology**

**Type: Conceptual**

**Page(s): 4**

**Answer: False**

**Rationale: Psychology is based on empirical evidence; many self-help books are based on anecdotal evidence.**

3. Scholars of the past who wanted to understand human behavior tended to rely on anecdotes and descriptions of individual cases.

**Section: The Science of Psychology**

**Type: Factual**

**Page(s): 5**

**Answer: True**

**Rationale: Statement of fact.**

4. Phrenologists suggested that specific character and personality traits could be read from bumps on the head.

**Section: The Science of Psychology**

**Type: Factual**

**Page(s): 5–6**

**Answer: True**

**Rationale: Statement of fact.**

5. Psychology became a formal discipline in the sixteenth century.

**Section: The Science of Psychology**

**Type: Factual**

**Page(s): 6**

**Answer: False**

**Rationale: Psychology became a formal discipline in the late nineteenth century.**

6. Functionalism was an early psychological approach that emphasized the purpose of behavior and consciousness.

**Section: The Science of Psychology**

**Type: Factual**

**Page(s): 6**

**Answer: True**

**Rationale: Statement of fact.**

7. Sigmund Freud argued that many of his patients' symptoms had mental, not bodily, causes.

**Section: The Science of Psychology**

**Type: Factual**

**Page(s): 6**

**Answer: True**

**Rationale: Statement of fact.**

8. Psychologists from the cognitive perspective would be likely to agree that the symptoms of anxiety may be caused by a chemical imbalance.

**Section: The Science of Psychology**

**Type: Conceptual**

**Page(s): 6–8**

**Answer: False**

**Rationale: Psychologists from the biological perspective would be likely to agree that the symptoms of anxiety may be caused by a chemical imbalance.**

9. Psychologists from the biological perspective would be likely to agree that anxiety is due to forbidden, unconscious desires.

**Section: The Science of Psychology**

**Type: Conceptual**

**Page(s): 6–8**

**Answer: False**

**Rationale: Psychologists from the psychodynamic perspective would be likely to agree that anxiety is due to forbidden, unconscious desires.**

10. The learning perspective is an approach that emphasizes how the environment and experience affect a person's actions.

**Section: The Science of Psychology**

**Type: Factual**

**Page(s): 7**

**Answer: True**

**Rationale: Statement of fact.**

11. Applied psychology is the study of psychological issues that have direct, practical significance.

**Section: What Psychologists Do**

**Page(s): 9**

**Type: Factual**

**Answer: True**

**Rationale: Statement of fact.**

12. Clinical programs leading to a Psy.D. focus on professional practice and do not usually require a research dissertation.

**Section: What Psychologists Do**

**Page(s): 10**

**Type: Factual**

**Answer: True**

**Rationale: Statement of fact.**

13. A hypothesis is an organized system of assumptions and principles that purports to explain a specified set of phenomena and their interrelationships.

**Section: Critical and Scientific Thinking in Psychology**

**Page(s): 13**

**Type: Factual**

**Answer: False**

**Rationale: This is a definition of a theory, not a hypothesis.**

14. Terms used in hypotheses are given operational definitions, which specify how the phenomena in question are to be observed and measured.

**Section: Critical and Scientific Thinking in Psychology**

**Page(s): 13**

**Type: Factual**

**Answer: True**

**Rationale: Statement of fact.**

15. Biases are assumptions that keep us from considering evidence fairly, or that cause us to ignore evidence entirely.

**Section: Critical and Scientific Thinking in Psychology**

**Page(s): 14**

**Type: Factual**

**Answer: True**

**Rationale: Statement of fact.**

16. Argument by anecdote occurs when a person generalizes from a personal experience to everyone.

**Section: Critical and Scientific Thinking in Psychology**

**Page(s): 15**

**Type: Factual**

**Answer: True**

**Rationale: Statement of fact.**

17. A sample's representativeness is less critical than its size.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 18**

**Type: Factual**

**Answer: False**

**Rationale: A sample's representativeness is more critical than its size.**

18. An advantage of the naturalistic observation is that it allows the use of sophisticated equipment.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 19**

**Type: Factual**

**Answer: False**

**Rationale: This is an advantage of laboratory observation, not naturalistic observation.**

19. Observational studies are more useful for describing behavior than for explaining behavior.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 19**

**Type: Factual**

**Answer: True**

**Rationale: Statement of fact.**

20. The ability of a test to measure what it is designed to measure is called reliability.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 20**

**Type: Factual**

**Answer: False**

**Rationale: The ability of a test to measure what it is designed to measure is called validity, not reliability.**

21. Popular polls often suffer from volunteer bias because those who feel strongly enough about their opinions may differ from those who remain silent.

**Section: Descriptive Studies: Establishing the Facts**

**Page(s): 20–21**

**Type: Factual**

**Answer: True**

**Rationale: Statement of fact.**

22. An association between increases in one variable and decreases in the other variable is called a positive correlation.

**Section: Correlational Studies: Looking for Relationships**

**Page(s): 22–23**

**Type: Factual**

**Answer: False**

**Rationale: This is a description of a negative correlation.**

23. A correlation of  $-.60$  is stronger than a correlation of  $+.35$ .

**Section: Correlational Studies: Looking for Relationships**

**Page(s): 22–23**

**Type: Factual**

**Answer: True**

**Rationale: The farther from zero, the stronger the correlation. Being positive or negative does not affect the strength.**

24. When a correlation coefficient indicates a strong relationship between two variables, one variable is causing the other.

**Section: Correlational Studies: Looking for Relationships**

**Page(s): 23**

**Type: Factual**

**Answer: False**

**Rationale: Correlation does not provide information about causal relationships.**

25. A laboratory observation is a controlled test of a hypothesis in which the researcher manipulates one variable to discover its effect on another.

**Section: The Experiment: Hunting for Causes**

**Page(s): 24–25**

**Type: Factual**

**Answer: False**

**Rationale: This is a description of an experiment, not a laboratory observation.**

26. The variable that an experimenter manipulates is called the dependent variable.

**Section: The Experiment: Hunting for Causes**

**Page(s): 25**

**Type: Factual**

**Answer: False**

**Rationale: The variable that an experimenter manipulates is the independent variable, not the dependent variable.**

27. Ideally, everything in an experiment except the independent variable is held constant.

**Section: The Experiment: Hunting for Causes**

**Page(s): 25**

**Type: Factual**

**Answer: True**

**Rationale: Statement of fact.**

28. In the control condition, subjects are treated exactly as they are in the experimental condition, except that they are not exposed to the same treatment of the independent variable.

**Section: The Experiment: Hunting for Causes**

**Page(s): 25**

**Type: Factual**

**Answer: True**

**Rationale: Statement of fact.**

29. If we have enough participants in our study and use a random assignment procedure, then individual characteristics that could possibly affect the results are likely to be roughly balanced in the two groups.

**Section: The Experiment: Hunting for Causes**

**Page(s): 26**

**Type: Factual**

**Answer: True**

**Rationale: Statement of fact.**

30. Double-blind studies are conducted in order to avoid the powerful influence of experimenter effects on the results of an experiment.

**Section: The Experiment: Hunting for Causes**

**Page(s): 26**

- Answer: True**
- Type: Factual**  
**Rationale: Statement of fact.**
31. The arithmetic mean is an average that is calculated by adding up a set of quantities and dividing the sum by the total number of quantities in the set.  
**Section: Evaluating the Findings**  
**Type: Factual**  
**Rationale: Statement of fact.**  
**Page(s): 29**  
**Answer: True**
32. The standard deviation is a commonly used measure of variability that indicates the average difference between scores in a distribution and their mean.  
**Section: Evaluating the Findings**  
**Type: Factual**  
**Rationale: Statement of fact.**  
**Page(s): 29**  
**Answer: True**
33. Inferential statistics are statistical procedures that organize and summarize research data.  
**Section: Evaluating the Findings**  
**Type: Factual**  
**Rationale: This is a definition of descriptive statistics, not inferential statistics.**  
**Page(s): 29**  
**Answer: False**
34. A study in which subjects of different ages are compared at a given time is called a longitudinal study.  
**Section: Evaluating the Findings**  
**Type: Factual**  
**Rationale: This is a definition of cross-sectional research, not longitudinal research.**  
**Page(s): 30**  
**Answer: False**
35. Meta-analysis combines and analyzes data from many studies, instead of assessing each study's results separately.  
**Section: Evaluating the Findings**  
**Type: Factual**  
**Rationale: Statement of fact.**  
**Page(s): 31**  
**Answer: True**

### **Short Answer Questions**

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1. Explain why psychology is not a “fancy name” for common sense.  
**Section: The Science of Psychology**  
**Type: Conceptual**  
**Answer: Psychology relies on empirical evidence, and psychological research often produces findings that contradict common beliefs.**  
**Page(s): 4**
2. Explain why phrenology is considered today to be a pseudoscience.  
**Section: The Science of Psychology**  
**Type: Conceptual**  
**Answer: Phrenology was a pseudoscientific theory because it was not based on good empirical methods, and counterevidence that did not support the theory was simply explained away.**  
**Page(s): 5–6**
3. How do the learning perspective and the cognitive perspective differ?  
**Section: The Science of Psychology**  
**Type: Conceptual**  
**Answer: The learning perspective is concerned with how the environment and experience affect actions. The cognitive perspective emphasizes what goes on in people's heads.**  
**Page(s): 7**
4. Distinguish between basic and applied psychology.  
**Section: What Psychologists Do**  
**Type: Factual**  
**Page(s): 9**



Answer: Basic psychology is the study of psychological issues in order to gain knowledge for its own sake, whereas applied psychology is the study of psychological issues that have direct practical application.

5. Alexia and Holly both plan to become clinical psychologists, although Alexia is applying to graduate schools to pursue a Ph.D. and Holly plans to earn a Psy.D. What different experiences and requirements is each likely to encounter in earning her graduate degree?

Section: What Psychologists Do

Page(s): 10

Type: Applied

Answer: Alexia will likely be trained as both a scientist and as a practitioner and will be required to do a dissertation. Holly will likely be trained for professional practice only, and will probably not have to do a dissertation.

6. Distinguish between a theory and a hypothesis.

Section: Critical and Scientific Thinking in Psychology

Page(s): 13, 15

Type: Factual

Answer: A theory is an organized system of assumptions and principles that purports to explain a specified set of phenomena. A hypothesis is a prediction about a specified set of phenomena.

7. What is the “principle of falsifiability”?

Section: Critical and Scientific Thinking in Psychology

Page(s): 14

Type: Factual

Answer: The principle of falsifiability states that scientific theories must make predictions that can be refuted, or disconfirmed, by empirical evidence.

8. Why is “tolerating uncertainty” considered an important skill for critical thinking?

Section: Critical and Scientific Thinking in Psychology

Page(s): 16

Type: Conceptual

Answer: Tolerating uncertainty allows critical thinkers to say “I’m not sure” when there isn’t enough evidence to permit strong conclusions.

9. Distinguish between reliability and validity in psychological testing.

Section: Descriptive Studies: Establishing the Facts

Page(s): 20

Type: Factual

Answer: Reliability refers to the consistency of scores, meaning that an individual should get a similar score every time he or she takes the test, whereas validity refers to the ability of a test to measure what it is supposed to measure.

10. What does it mean to say that TV watching is positively correlated with children’s aggressiveness?

Section: Correlational Studies: Looking for Relationships

Page(s): 22

Type: Conceptual

Answer: A positive correlation means that the more TV that children watch, the more aggressiveness is displayed. However, it does not mean that watching TV *causes* children to be more aggressive.

11. Distinguish between the independent and dependent variables in an experiment.

Section: The Experiment: Hunting for Causes

Page(s): 25

Type: Factual

Answer: The independent variable is what the experimenter manipulates, whereas the dependent variable is what the experimenter measures to see the effects of the independent variable.

12. What type of study design prevents experimenter effects and how does it accomplish this?

Section: The Experiment: Hunting for Causes

Page(s): 26

Type: Factual

Answer: Experimenter effects are controlled through double-blind studies. Because the experimenter doesn’t know which group the participants are in, their expectations cannot influence the participants.

13. Explain why many psychologists have called for a greater amount of field research rather than strict laboratory experiments.

Section: The Experiment: Hunting for Causes

Page(s): 27

Type: Conceptual

Answer: Laboratory experiments may be very artificial and have fewer real-world applications, whereas field experiments are conducted in naturalistic settings and have direct application to those settings.

14. Distinguish between descriptive and inferential statistics.

Section: Evaluating the Findings

Page(s): 29

Type: Factual

Answer: Descriptive statistics organize and summarize research data, whereas inferential statistics allow researchers to draw inferences about how statistically meaningful a study's results are.

15. What can you say about a study that is statistically significant at the .05 level?

Section: Evaluating the Findings

Page(s): 29

Type: Conceptual

Answer: The results of a study are unlikely to have occurred by chance alone. Specifically, the results of the study would be expected to occur by chance 5 or fewer times in 100 repetitions of the study.

16. Distinguish between a longitudinal study and a cross-sectional study.

Section: Evaluating the Findings

Page(s): 30

Type: Factual

Answer: A longitudinal study is one in which participants are followed and periodically reassessed over a period of time; a cross-sectional study is one in which individuals of different ages are assessed and compared at a given time.

## Essay Questions

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1. To most people, the word *psychologist* conjures up an image of a therapist listening intently to a client, but not all psychologists do clinical work. Describe the different professional activities of psychologists with doctorates. Include examples of work in each of the three general categories.

**Section: What Psychologists Do**

**Page(s): 9–11**

**Type: Factual**

**Answer: A good answer will include the following key points.**

- Psychologists teach and do research in colleges and universities.
- Psychologists provide mental health services (e.g., clinical and counseling psychologists).
- Psychologists conduct research and apply the findings of psychology in nonacademic settings such as business, sports, government, law, and the military.
- Examples will vary.

2. One common form of oversimplification is *argument by anecdote*. Explain this type of critical thinking error. Create your own example of an argument by anecdote.

**Section: Critical and Scientific Thinking in Psychology**

**Page(s): 15**

**Type: Conceptual**

**Answer: A good answer will include the following key points.**

- Argument by anecdote involves generalizing from a personal experience or a few examples.
- An example should be given that shows how a person might generalize from a personal experience to all people.

3. Many nonscientists use the word “theory” to mean a personal opinion or guess, as in “I have a theory about who stole my bicycle.” Contrast this use of *theory* with its meaning in science. Include an example of a scientific theory and explain why it meets the scientific definition of the word.

**Section: Critical and Scientific Thinking in Psychology**

**Page(s): 15**

**Type: Conceptual**

**Answer: A good answer will include the following key points.**

- Scientific theories are organized systems of assumptions and principles that purport to explain a specified set of phenomena and their interrelationships.

- Unlike personal opinions or guesses, many theories are well supported and accepted by almost all scientists.
  - Examples will vary.
4. Compare the advantages and the disadvantages of conducting a naturalistic observation versus a laboratory observation. Describe a topic that you believe would be more effectively studied by a laboratory observation than by a naturalistic experiment.
- Section: Descriptive Studies: Establishing the Facts** **Page(s): 19**  
**Type: Conceptual**  
**Answer: A good answer will include the following key points.**
- Naturalistic observation can tell you how subjects behave in their normal environment, however, researchers have little control.
  - With laboratory observation, researchers have more control and it is easier to use special equipment, however, the presence of researchers and equipment may make subjects behave differently than they would in a more natural situation.
  - Several topics might be suggested for study. Generally topics that are more effectively studied in the laboratory require special equipment or a lot of control over the environment.
5. The president of the Parent Teacher Association (PTA) is concerned after reading that during puberty children have increased needs for sleep. She wants to find out if other parents of middle-school children would support a later starting time for school. At one of the Tuesday night meetings, she conducts a survey of the PTA members in order to address this question. When she asks those parents in support of the change to raise their hands, she discovers that 85 percent of the parents support a later starting time. What information has she gained by conducting this survey? What shortcomings exist in her survey?
- Section: Descriptive Studies: Establishing the Facts** **Page(s): 20–21**  
**Type: Applied**  
**Answer: A good answer will include the following key points.**
- She has learned that a majority of other PTA members who attend meetings support a later starting time.
  - A major shortcoming is that the PTA members at the meeting may not be representative of all parents of students at the school in question.
6. Why is it important to go beyond averages when summarizing data? What other descriptive statistics are used to help interpret data?
- Section: Evaluating the Findings** **Page(s): 29**  
**Type: Factual**  
**Answer: A good answer will include the following key points.**
- An average may not actually occur in any individual case.
  - It is important to also have some indication of the variability of results such as the range or standard deviation.
  - A measure of variability helps one to know how representative an average is.
7. Rarely does a psychological study have completely straightforward results. Usually there is some possibility that the difference between two groups could be due to chance. Explain how inferential statistics help us determine how statistically meaningful a study's results are.
- Section: Evaluating the Findings** **Page(s): 29**  
**Type: Factual**  
**Answer: A good answer will include the following key points.**
- One type of inferential statistics, tests of significance, assess the likelihood that a given set of results could occur by chance.
  - Results are typically considered statistically significant only if they would occur by chance less than five times in one hundred.