

Test Bank for Invitation to the Life Span 5th Berger

Chapter 1

1. The science of human development seeks to understand:

- a. the meaning of life.
- b. the accuracy of new theories.
- c. the works of Freud, Piaget, and Erikson.
- d. how and why people change over time.

ANSWER: d

2. Dr. Xavier ponders whether a specific brain chemical can be suppressed if a patient is given a large dose of vitamin D. Dr. Xavier has just demonstrated which step in the scientific method?

- a. first
- b. second
- c. third
- d. fourth

ANSWER: a

3. Dr. Schmidt predicts that a certain drug will reduce hallucinations in patients with schizophrenia. Their prediction is called:

- a. a conclusion.
- b. empirical evidence.
- c. a hypothesis.
- d. an observation.

ANSWER: c

4. Professor Soto designed and conducted a study to determine if a particular drug would help patients suffering from depression. By designing and conducting this experiment, they were able to:

- a. establish a positive correlation.
- b. demonstrate proof.
- c. test the hypothesis.
- d. confirm the results.

ANSWER: c

5. Dr. Inez is curious to know more about how children's peer relationships develop over time. To gain an understanding of this subject that is not based on opinion or personal bias, Dr. Inez should:

- a. use the scientific method to collect data and establish facts.
- b. have the children undergo psychoanalysis.
- c. interview parents and teachers.
- d. read Dr. Spock's book *Baby and Child Care*.

ANSWER: a

6. The first step in the scientific method involves:

- a. posing a question.
- b. conducting research.

Chapter 1

- c. analyzing evidence.
- d. developing a hypothesis.

ANSWER: a

7. The second step in the scientific method involves:
- a. posing a question.
 - b. conducting research.
 - c. developing a hypothesis.
 - d. sharing the results.

ANSWER: c

8. The third step in the scientific method involves:
- a. posing a question.
 - b. conducting research.
 - c. sharing the results.
 - d. developing a hypothesis.

ANSWER: b

9. The fourth step in the scientific method involves:
- a. posing a question.
 - b. conducting research.
 - c. developing a hypothesis.
 - d. supporting or refuting a hypothesis.

ANSWER: d

10. Empirical evidence is based on:
- a. theories and speculation.
 - b. observation, experience, or experiment.
 - c. inferences based on personal biases.
 - d. opinions generated by focus groups.

ANSWER: b

11. After posing a question, a researcher using the scientific method:
- a. draws conclusions.
 - b. runs an experiment.
 - c. selects a group of participants.
 - d. develops a hypothesis.

ANSWER: d

12. The final step in the scientific method involves:
- a. testing a hypothesis.

Chapter 1

- b. posing a question.
- c. conducting research.
- d. reporting the results.

ANSWER: d

13. Dr. Greene is interested in designing a study on children's language acquisition. What is the first step that Dr. Greene should take, according to the scientific method?

- a. recruit children and their parents as participants in the study
- b. develop a hypothesis regarding language acquisition
- c. pose a research question about language acquisition
- d. draw conclusions on the way children acquire language

ANSWER: c

14. A *hypothesis* is a(n):

- a. experiment.
- b. prediction that can be tested.
- c. conclusion drawn from research.
- d. replication of a scientific study.

ANSWER: b

15. *Replication* involves:

- a. the repetition of a study using different participants.
- b. the repetition of a study using the same participants.
- c. designing a new study based on information from a previous study.
- d. designing a new study using new ideas and information.

ANSWER: a

16. Dr. Stott conducts a study in which they find that smoking is correlated with an increased risk of high blood pressure. They publish their results. Then Dr. Mecos conducts the same study using different participants in another city. Dr. Mecos's work is an example of:

- a. scientific controversy.
- b. replication.
- c. ethics.
- d. data analysis.

ANSWER: b

17. Which of these hypotheses is NOT related to the idea that music is related to higher intelligence?

- a. Brains react differently to Mozart versus Bach.
- b. Older individuals prefer music compared to younger individuals.
- c. Fetal brain waves reflect what music is played.
- d. Rats are smarter if they listen to Mozart.

Chapter 1

ANSWER: b

18. Parents who spend a great deal of time and money trying to find the best school for their children believe in the importance of _____ as it relates to development.

- a. nurture
- b. replication
- c. nature
- d. classical conditioning

ANSWER: a

19. _____ refers to all the environmental influences that affect development after conception.

- a. Epigenetics
- b. Nurture
- c. Nature
- d. Differential susceptibility

ANSWER: b

20. In the science of human development, *nature* refers to:

- a. the influence of the genes that people inherit.
- b. environmental influences.
- c. patterns of development.
- d. developmental differences.

ANSWER: a

21. In the science of human development, *nurture* refers to _____ traits.

- a. hereditary
- b. genetic
- c. environmental
- d. unique

ANSWER: c

22. Dr. Ghufuran believes that genetics is responsible for personality traits. Dr. Marks believes that a person's family life is responsible for personality traits. They are on different sides of the _____ debate.

- a. nature–nurture
- b. intelligent design–evolution
- c. genes–development
- d. traits–conditioning

ANSWER: a

23. Most developmental psychologists believe that development is the result of:

- a. nature and nurture acting separately.

Chapter 1

- b. genetic traits.
- c. nature and nurture acting together.
- d. environmental influences.

ANSWER: c

24. Which of these illustrates the influence of nature in development?

- a. having a mother who smoked during pregnancy
- b. having the gene for epilepsy
- c. eating a healthy diet
- d. living in a loud neighborhood

ANSWER: b

25. Recent research has demonstrated that playing a musical instrument can impact brain development and cognition in:

- a. limbic system.
- b. auditory areas.
- c. prefrontal cortex.
- d. hypothalamus.

ANSWER: b

26. Stan and Marcus, close friends, grew up in the same neighborhood. Both were exposed to chronic poverty, gang violence, and family dysfunction. By the time they were in high school, Stan was flunking out of most classes, had a child, and had been arrested numerous times for drug-related crimes and theft. Marcus, on the other hand, was a good student, played football, and had aspirations to attend college. These diverse developmental trajectories, despite similar environmental influences, illustrate the concept of:

- a. "epigenetics."
- b. a "critical period."
- c. a "sensitive period."
- d. "differential susceptibility."

ANSWER: d

27. In one study that looked at the effects of maternal depression during pregnancy and child outcomes, researchers found that children who had a particular type of the serotonin transporter gene were likely to be emotionally immature if their mothers were depressed. However, children with this gene were more mature than average if their mothers were not depressed. These findings illustrate the concept of:

- a. "epigenetics."
- b. a "critical period."
- c. a "sensitive period."
- d. "differential susceptibility."

ANSWER: d

28. *Differential sensitivity* means that certain people have genes that:

Chapter 1

- a. make them more vulnerable to particular experiences.
- b. interact and coordinate to influence developmental outcomes.
- c. determine their social interactions and intellectual outcomes.
- d. have an unknown impact on their long-term development.

ANSWER: a

29. The life-span perspective takes into account development from:

- a. birth to death.
- b. childhood to middle age.
- c. birth to adolescence.
- d. conception to death.

ANSWER: d

30. Late adulthood begins at age:

- a. 45.
- b. 55.
- c. 65.
- d. 75.

ANSWER: c

31. A developmental perspective requires consideration of:

- a. time.
- b. one's birthday.
- c. observer bias.
- d. scientific conclusions.

ANSWER: a

32. With respect to the concept of multi-directional development, rapid and dramatic change, such as when a larva becomes a mosquito, is an example of:

- a. continuity.
- b. discontinuity.
- c. genetics.
- d. nurture.

ANSWER: b

33. The concept of multi-directional development suggests that gradual change, as when a tortoise grows larger over its 150-year lifespan, is an example of:

- a. continuity.
- b. discontinuity.
- c. genetics.
- d. nurture.

Chapter 1

ANSWER: a

34. Which example BEST illustrates a *critical period*?

- a. a child learning to walk
- b. a child learning a second language before age 4
- c. a human fetus developing fingers and toes between 28 and 54 days in utero
- d. a child learning to ride a bike between 5 and 6 years of age

ANSWER: c

35. Which example BEST illustrates a *sensitive period*?

- a. a child who is born blind
- b. an egg being fertilized
- c. a fetus developing fingers and toes
- d. a child learning to speak a second language

ANSWER: d

36. Between 1957 and 1961, many pregnant women took thalidomide to alleviate morning sickness; this drug disrupted a(n) _____ period of prenatal development.

- a. sensitive
- b. critical
- c. early
- d. late

ANSWER: b

37. A woman in Honduras worked in a field treated with pesticides during pregnancy. Their son was subsequently born with no arms or legs. Their pesticide exposure likely occurred during a(n) _____ period of prenatal development.

- a. critical
- b. early
- c. late
- d. sensitive

ANSWER: a

38. Suan did not learn to read until adolescence. When they did learn to read, it was much harder for them than it was for their peers. If Suan had learned to read during the childhood years, they would have acquired literacy skills much more competently. Suan's difficulty in learning to read as an adolescent demonstrates the concept of a(n) "_____ period."

- a. critical
- b. early
- c. late
- d. sensitive

ANSWER: d

Chapter 1

39. The effects of climate, noise, population density, family size, and multiethnic communities illustrate that development is:

- a. linear.
- b. multi-directional.
- c. multi-contextual.
- d. multi-cultural.

ANSWER: c

40. The ecological-systems approach was proposed by:

- a. Maslow.
- b. Freud.
- c. Bronfenbrenner.
- d. Skinner.

ANSWER: c

41. In Bronfenbrenner's ecological-systems approach, the _____ refers to the interactions among systems.

- a. macrosystem
- b. exosystem
- c. microsystem
- d. mesosystem

ANSWER: d

42. Which term did Bronfenbrenner use to describe the impact of the specific time in history on a person's development?

- a. macrosystem
- b. microsystem
- c. chronosystem
- d. exosystem

ANSWER: c

43. Debbie was born during the Great Depression. Within the context of the ecological-systems approach, Debbie's experience of growing up during this time period falls within the:

- a. chronosystem.
- b. exosystem.
- c. microsystem.
- d. macrosystem.

ANSWER: a

44. Dwayne lives with their mother, father, and younger sister. This makes up their:

- a. chronosystem.
- b. exosystem.

Chapter 1

- c. microsystem.
- d. macrosystem.

ANSWER: c

45. Dr. Merko is studying the impact of exosystems on human development. Which of these would Dr. Merko be MOST interested in examining?

- a. cultural values and economic processes
- b. family and peer groups
- c. medical centers and religious institutions
- d. the development of the skeletal structure in children

ANSWER: c

46. In Bronfenbrenner's ecological-systems model, a hospital in the community is an example of the:

- a. ecosystem.
- b. microsystem.
- c. chronosystem.
- d. exosystem.

ANSWER: d

47. In Bronfenbrenner's ecological-systems model, family and peers are part of one's:

- a. microsystem.
- b. exosystem.
- c. macrosystem.
- d. social system.

ANSWER: a

48. A person's macrosystem includes:

- a. political processes.
- b. the peer group.
- c. school and church.
- d. the historical setting.

ANSWER: a

49. According to Bronfenbrenner's ecological-systems approach, the historical context that affects other systems is called the:

- a. ecosystem.
- b. chronosystem.
- c. mesosystem.
- d. macrosystem.

ANSWER: b

Chapter 1

50. Mary grew up in the Great Depression, while their grandson is part of the Millennial generation. Mary and their grandson belong to different:

- a. socioeconomic groups.
- b. microsystems.
- c. cohorts.
- d. cultural groups.

ANSWER: c

51. Kindergarten students are considered to be in the same:

- a. social construction.
- b. network.
- c. socioeconomic status.
- d. cohort.

ANSWER: d

52. Socioeconomic status refers to an individual's:

- a. culture.
- b. ethnicity.
- c. social class.
- d. race.

ANSWER: c

53. The socioeconomic status of an individual includes, among other things, the person's:

- a. ethnicity.
- b. education level.
- c. political beliefs.
- d. religion.

ANSWER: b

54. The socioeconomic status of an individual includes, among other things, the person's:

- a. ethnicity.
- b. political beliefs.
- c. neighborhood.
- d. religion.

ANSWER: c

55. Zachary is a part-time construction worker. Maria is an attorney. These occupations reflect Zachary's and Maria's:

- a. SES.
- b. political values
- c. cohorts.

Chapter 1

- d. family values.

ANSWER: a

56. Dorian has a college degree, lives in a nice neighborhood, and earns more than \$50,000 a year. This information defines their:

- a. economic potential.
- b. socioeconomic status.
- c. cohort.
- d. microsystem.

ANSWER: b

57. A system of shared beliefs, conventions, norms, behaviors, expectations, and symbolic representations that persist over time and prescribe social rules of conduct is the definition of:

- a. a cohort.
- b. culture.
- c. nature.
- d. nurture.

ANSWER: b

58. The general term for a concept that is created by society is:

- a. culture.
- b. a cohort.
- c. a social construction.
- d. SES.

ANSWER: c

59. Li, age 11, is a recent Chinese immigrant. Li's new teacher has noticed that they rarely talk, do not make eye contact, and seem very shy. When the teacher speaks to Li's parents, they are surprised, as these characteristics are valued in Li's culture. The perception of Li's behavior reflects the concept of a(n):

- a. microsystem.
- b. exosystem.
- c. social construction.
- d. social phobia.

ANSWER: c

60. One historical example of the "difference-equals-deficit" error is:

- a. men perceiving women as intellectually inferior.
- b. European immigrants crossing the ocean to settle in America.
- c. how people's IQ scores have been steadily rising for more than 100 years.
- d. women taking factory jobs during World War II.

ANSWER: a

Chapter 1

61. An example of the "difference-equals-deficit" error is:

- a. assuming that children who are hearing impaired cannot communicate as well as children who can hear.
- b. failing to compare typical and atypical behavior.
- c. ignoring inconsistencies in a child's language development.
- d. identifying flaws within the scientific method.

ANSWER: a

62. People whose ancestors were born in the same region and who usually share the same language and religion are called a(n):

- a. racial group.
- b. ethnic group.
- c. SES group.
- d. exosystem.

ANSWER: b

63. According to the text, *race* is:

- a. part of the microsystem.
- b. a social construction.
- c. defined by heritage.
- d. multi-directional.

ANSWER: b

64. Some social scientists believe that _____ terms exaggerate minor differences between people.

- a. color
- b. diversity
- c. genetic analysis
- d. culture

ANSWER: a

65. The fact that race is a social construction:

- a. reflects inconsistencies in ethnic categories.
- b. does not make the term meaningless.
- c. means that it should be replaced with the term "culture."
- d. shows how powerful genetic influences are on development.

ANSWER: b

66. *Plasticity* refers to the:

- a. many academic fields that contribute data to the science of development.
- b. universals and specifics of human development in many cultural settings.
- c. vast array of contexts in which development occurs.

Chapter 1

- d. potential for human traits to be molded during development but also to remain durable.

ANSWER: d

67. The term *plasticity* reminds us that:

- a. human development is linear.
- b. critical and sensitive periods predict developmental outcomes.
- c. developmental change is possible.
- d. human traits are mostly inborn.

ANSWER: c

68. The idea that human development is an ongoing, ever-changing interaction between the body, mind, and every aspect of the environment reflects the:

- a. dynamic-systems approach.
- b. theory of evolution.
- c. concept of universality.
- d. domino effect.

ANSWER: a

69. Which of these is the BEST example of plasticity?

- a. a child who experiences a traumatic brain injury and relearns how to walk and talk
- b. a teenager who spends a summer in Chile as part of their church youth group
- c. a woman who leaves her job to stay home with her newborn
- d. a man who is in a serious car wreck and remains in a coma five years later

ANSWER: a

70. In the case study of David, he was exposed to _____ during his mother's pregnancy.

- a. HIV
- b. cancer-causing pesticides
- c. rubella
- d. pneumonia

ANSWER: c

71. In the case study of David, his IQ changed from about 40 to about 130, and his physical disabilities improved with age. These changes reflect which characteristic of development?

- a. sensitive period
- b. discontinuity
- c. critical period
- d. plasticity

ANSWER: d

72. Which theorist was a leader in describing the interaction between culture and education?

Chapter 1

- a. Lev Vygotsky
- b. Urie Bronfenbrenner
- c. Jean Piaget
- d. Erik Erikson

ANSWER: a

73. What is one reason why children born into low-SES families are likely to become low-SES adults?

- a. Higher family income decreases the likelihood of a good education.
- b. Low family income reduces access to good education.
- c. Higher family income is related to reduced study time.
- d. Low family income is related to increased study time.

ANSWER: b

74. What is the *capital* in capitalism?

- a. education
- b. food security
- c. support from people
- d. money

ANSWER: d

75. What is *social capital*?

- a. education
- b. food security
- c. support from people
- d. money

ANSWER: c

76. Which location has more pigmentary diversity compared to anywhere else in the world?

- a. China
- b. Europe
- c. Australia
- d. Africa

ANSWER: d

77. In the United States, the concept of _____ was created to justify slavery.

- a. ethnicity
- b. race
- c. age
- d. SES

ANSWER: b

Chapter 1

78. Which of these is socially constructed?

- a. age
- b. religion
- c. race
- d. income

ANSWER: c

79. A comprehensive and organized explanation of many phenomena is called a:

- a. hypothesis.
- b. theory.
- c. conclusion.
- d. development.

ANSWER: b

80. A systematic statement of principles and generalizations that provides a framework for understanding how and why people change over time is called a:

- a. hypothesis.
- b. developmental theory.
- c. conclusion.
- d. stage.

ANSWER: b

81. In the first half of the twentieth century, which two opposing theories dominated the discipline of psychology?

- a. humanism and cognitive theory
- b. behaviorism and sociocultural theory
- c. psychoanalytic theory and behaviorism
- d. cognitive theory and sociocultural theory

ANSWER: c

82. The foundation of psychoanalytic theory is:

- a. observable behaviors.
- b. inner drives and motives, and unconscious needs.
- c. an individual's ideas and beliefs.
- d. self-awareness and willingness to change.

ANSWER: b

83. Who developed the psychosocial theory?

- a. Piaget
- b. Freud
- c. Watson

Chapter 1

d. Erikson

ANSWER: d

84. _____ emphasizes unconscious drives and early experiences with respect to development, whereas _____ emphasizes learning by association, reinforcement, or observation with respect to development.

- a. Psychoanalytic theory; behaviorism
- b. Psychoanalytic theory; cognitive theory
- c. Behaviorism; psychoanalytic theory
- d. Cognitive theory; psychoanalytic theory

ANSWER: a

85. _____ emphasizes unconscious drives and early experiences with respect to development, whereas _____ emphasizes learning by understanding how a person thinks.

- a. Psychoanalytic theory; behaviorism
- b. Psychoanalytic theory; cognitive theory
- c. Behaviorism; psychoanalytic theory
- d. Cognitive theory; psychoanalytic theory

ANSWER: b

86. Which is the correct order of the stages of Freud's psychosexual theory, beginning with infancy and ending with adolescence?

- a. oral, anal, genital, phallic, latency
- b. anal, oral, phallic, genital, latency
- c. oral, anal, phallic, latency, genital
- d. latency, phallic, oral, anal, genital

ANSWER: c

87. Each stage of Freud's psychosexual theory of development is characterized by a conflict associated with different parts of the body. According to Freud, how people experience and resolve each conflict influences personality:

- a. throughout life, because early years provide the foundation of adult behavior.
- b. throughout life, but only if some of the conflicts are successfully resolved.
- c. only in childhood, with new conflicts emerging later that shape adult identity.
- d. at a particular stage of development, also called a sensitive period.

ANSWER: a

88. According to Freud's psychosexual theory, the _____ stage centers around breast-feeding and weaning.

- a. oral
- b. anal
- c. phallic
- d. genital

ANSWER: a

Chapter 1

89. Freud argued that the goal of a healthy life is to:

- a. connect spiritually with another person.
- b. follow moral codes set by society.
- c. avoid conflict and promote social harmony.
- d. love and to work.

ANSWER: d

90. Although many of the theorists who follow Freud's psychoanalytic theory have modified and expanded his ideas, they agree on the importance of:

- a. early childhood experiences and psychosexual conflicts.
- b. psychosexual conflicts and the unconscious.
- c. early childhood experiences and the unconscious.
- d. psychosexual conflicts and stages of psychosexual development.

ANSWER: c

91. Unlike Freud, Erikson:

- a. only described development in childhood.
- b. believed that adult problems reflect childhood conflicts.
- c. emphasized family and culture in his stages.
- d. leaned toward the behaviorist perspective.

ANSWER: c

92. Which psychoanalytic theorist identified unique stages of development from birth through late adulthood?

- a. Freud
- b. Piaget
- c. Skinner
- d. Erikson

ANSWER: d

93. Within Erikson's theory of psychosocial development, each of the developmental stages is characterized by a particular challenge, or a:

- a. conflict negotiation.
- b. developmental conflict.
- c. developmental crisis.
- d. resolution.

ANSWER: c

94. Which of Erikson's stages can be compared to Freud's oral stage of development?

- a. initiative versus guilt
- b. intimacy versus isolation

Chapter 1

- c. trust versus mistrust
- d. autonomy versus shame and doubt

ANSWER: c

95. Learning theorists believe that psychologists should focus on:
- a. observable behaviors.
 - b. inner drives and motives.
 - c. a person's ideas and beliefs.
 - d. a person's sexual conflict.

ANSWER: a

96. Behaviorism has also been referred to as " _____ theory."
- a. conditioning
 - b. learning
 - c. modeling
 - d. operant

ANSWER: b

97. The process by which a response becomes linked to a particular stimulus is called:
- a. psychoanalysis.
 - b. cognition.
 - c. observational learning.
 - d. conditioning.

ANSWER: d

98. Pavlov's experiments with dogs that salivated when they heard a specific noise without the presence of food provide an example of:
- a. classical conditioning.
 - b. observational learning.
 - c. operant conditioning.
 - d. reinforcement.

ANSWER: a

99. When persons or animals learn to associate a neutral stimulus with a meaningful stimulus, gradually responding to the neutral stimulus in the same way as to the meaningful one, they are exhibiting:
- a. classical conditioning.
 - b. observational learning.
 - c. operant conditioning.
 - d. modeling.

ANSWER: a

Chapter 1

100. A balloon popped and made Chris cry. It happened again when they were at a holiday party. Now when Chris sees a balloon, they start to cry. According to the behaviorist perspective, Chris cries in response to the balloon because of:

- a. operant conditioning.
- b. observational learning.
- c. classical conditioning.
- d. modeling.

ANSWER: c

101. The type of conditioning that Skinner identified is referred to as "_____ conditioning."

- a. classical
- b. observational
- c. operant
- d. cognitive

ANSWER: c

102. Operant conditioning is also referred to as "_____ conditioning."

- a. classical
- b. instrumental
- c. observational
- d. reinforcement

ANSWER: b

103. Hernando, age 13, dislikes school. His parents were recently informed that Hernando has missed 12 days of school this quarter and has left school early on at least 4 occasions. Hernando's father has decided to drop Hernando off every morning and pick him up every afternoon to make sure he was attending school. Hernando is now attending school, but has gotten into serious trouble on multiple occasions, leading to a three-day out-of-school suspension. Since Hernando dislikes school and prefers to skip rather than attend, the out-of-school suspension represents a:

- a. reinforcement.
- b. punishment.
- c. conditioner.
- d. norm.

ANSWER: a

104. The boss praises the hourly employees for their good work. The boss hopes that the praise encourages the employees to continue to work hard. In this example, the reinforcement is:

- a. the boss's praise.
- b. worker productivity.
- c. the boss.
- d. an hourly wage.

ANSWER: a

Chapter 1

105. Any consequence that follows a behavior and makes a person likely to repeat that behavior is called a(n):

- a. punishment.
- b. condition.
- c. reinforcement.
- d. observation.

ANSWER: c

106. Theorists who promote classical conditioning believe that learned behavior is the result of _____, whereas theorists who promote operant conditioning believe that learned behavior is the result of _____.

- a. the association between one stimulus and another; past reinforcement
- b. past reinforcement; the association between one stimulus and another
- c. observing another person's actions; past reinforcement
- d. the association between one stimulus and another; observing another person's actions

ANSWER: a

107. Social learning theory indicates that learning occurs from:

- a. the association between one stimulus and another.
- b. past reinforcement.
- c. observing and imitating others.
- d. responding to a particular stimulus.

ANSWER: c

108. A person observes the actions of others and copies them. Social learning theorists would call this an example of:

- a. classical conditioning.
- b. operant conditioning.
- c. modeling.
- d. cognition.

ANSWER: c

109. Observational learning is also called:

- a. classical conditioning.
- b. operant conditioning.
- c. modeling.
- d. cognition.

ANSWER: c

110. Jeremy watches his friend kick a soccer ball into the goal. Later that day, Jeremy finds a soccer ball and proceeds to kick it into the goal. Jeremy most likely engaged in the same behavior as his friend due to:

- a. classical conditioning.
- b. modeling.

Chapter 1

- c. operant conditioning.
- d. reinforcement.

ANSWER: b

111. The foundation of cognitive theory is:

- a. observable behaviors.
- b. inner drives and motives.
- c. a person's thoughts and expectations.
- d. cultural influence.

ANSWER: c

112. _____ was a cognitive theorist.

- a. Freud
- b. Watson
- c. Piaget
- d. Vygotsky

ANSWER: c

113. With regard to cognitive development, Piaget argued that _____ is more revealing than _____.

- a. what children know; how they think
- b. how children think; what they know
- c. the cultural context; what children know
- d. what children know; their cultural context

ANSWER: b

114. Piaget's four stages of cognitive development, in order, are:

- a. formal operational, concrete operational, preoperational, and sensorimotor.
- b. preoperational, sensorimotor, formal operational, and concrete operational.
- c. sensorimotor, preoperational, concrete operational, and formal operational.
- d. sensorimotor, preoperational, formal operational, and concrete operational.

ANSWER: c

115. According to Piaget, intellectual advancement occurs because of cognitive:

- a. learning.
- b. resolution.
- c. equilibrium.
- d. modeling.

ANSWER: c

116. A state of mental balance in which people are not confused because they can use their existing thought processes to understand current experiences and ideas is called:

Chapter 1

- a. social learning.
- b. conflict resolution.
- c. cognitive equilibrium.
- d. information processing.

ANSWER: c

117. Irene has never seen a peach before today. As her dad hands it to her, he says that it is a fruit. Irene knows that apples and bananas are fruits and that she likes eating them, so she has a reference for this new experience. Irene is experiencing:

- a. social learning.
- b. operant conditioning.
- c. guided participation.
- d. cognitive equilibrium.

ANSWER: d

118. According to Piaget, when new experiences are interpreted to fit into old ideas, it is called:

- a. learning.
- b. assimilation.
- c. equilibrium.
- d. accommodation.

ANSWER: b

119. Sanjay has a small dog at home, so he knows about dogs. He is walking down the street and sees an animal walking toward him. The animal is very large; has four legs, fur, and a tail; and is barking. Sanjay knows that these are characteristics of a dog, given his knowledge of dogs. He quickly concludes that this animal is a dog. This example illustrates Piaget's concept of:

- a. operations.
- b. assimilation.
- c. equilibrium.
- d. accommodation.

ANSWER: b

120. According to Piaget, when old ideas are restructured to include new experiences, it is called:

- a. learning.
- b. assimilation.
- c. equilibrium.
- d. accommodation.

ANSWER: d

121. Maggie knows a lot about dogs. In fact, dogs are their favorite animal. They are walking down the street and see an animal walking toward them. The animal has four legs, fur, and a tail. Maggie knows that these are

Chapter 1

characteristics of dogs. But the animal coming toward them is meowing, not barking. Maggie's mom tells them that the animal is a cat. Now when Maggie sees an animal with four legs, a tail, and fur, they will conclude it is a dog if it barks and a cat if it meows, illustrating Piaget's concept of:

- a. operations.
- b. assimilation.
- c. equilibrium.
- d. accommodation.

ANSWER: d

122. With respect to Piaget's theory of cognitive development, the MOST difficult cognitive adaptation of these options is:

- a. assimilation.
- b. accommodation.
- c. sensorimotor behavior.
- d. equilibrium.

ANSWER: b

123. Approaches to toilet training have changed over time. At one point, it was suggested to parents to postpone toilet training until the child was at least a year old to avoid serious personality problems later on. This view is MOST consistent with:

- a. psychoanalytic theory.
- b. cognitive theory.
- c. behaviorism.
- d. information-processing theory.

ANSWER: a

124. Approaches to toilet training have changed over time. At one point, it was suggested that parents toilet-train whenever they wished, using reinforcement as part of the training. This view is MOST consistent with:

- a. psychoanalytic theory.
- b. cognitive theory.
- c. behaviorism.
- d. information-processing theory.

ANSWER: c

125. In order to understand the emotions, impulses, and habits of humans over the life span, it is important to understand how those same emotions, impulses, and habits developed within *Homo sapiens* over the past 100,000 years. This concept is consistent with _____ theory.

- a. psychoanalytic
- b. sociocultural
- c. information-processing
- d. evolutionary

ANSWER: d

Chapter 1

126. Which of these questions would be addressed by an evolutionary theorist?

- a. At what age do adolescents initiate sexual activity?
- b. How do social media affect self-esteem in young people?
- c. Why do pregnant women have morning sickness?
- d. What risk factors are associated with the development of Alzheimer's disease in late adulthood?

ANSWER: c

127. According to evolutionary theory, why are so many people afraid of snakes?

- a. because of daily life-threatening experiences
- b. because of unconscious memories of childhood experiences with snakes
- c. because they have learned by watching others react with fear to snakes
- d. because a fear of snakes helped our ancient ancestors survive

ANSWER: d

128. According to evolutionary theory, every species has two long-standing, biologically-based drives, namely:

- a. survival and reproduction.
- b. aggression and sex.
- c. hunger satiation and shelter.
- d. fear and aggression.

ANSWER: a

129. For centuries, men have needed a woman to be sexually faithful to ensure that her children are also his offspring. Which theory is MOST consistent with this explanation for faithfulness among romantic partners?

- a. eclectic theory
- b. evolutionary theory
- c. behaviorism
- d. sociocultural theory

ANSWER: b

130. _____ theories have made us aware of the impact on development of early-childhood experiences, remembered or not.

- a. Psychoanalytic
- b. Cognitive
- c. Sociocultural
- d. Eclectic

ANSWER: a

131. _____ has/have shown the effect that immediate response, associations, and examples have on learning, moment by moment and over time.

- a. Psychoanalytic theories

Chapter 1

- b. Cognitive theories
- c. Sociocultural theories
- d. Behaviorism

ANSWER: d

132. _____ theories have brought an understanding of intellectual processes and how our thoughts and beliefs affect every aspect of our development.

- a. Psychoanalytic
- b. Cognitive
- c. Sociocultural
- d. Eclectic

ANSWER: b

133. Scientific observation allows for the:

- a. study of individuals' behaviors in a systematic and objective manner.
- b. determination of cause-and-effect relationships.
- c. observation of participants without their knowledge.
- d. systematic manipulation of variables.

ANSWER: a

134. Which statement about scientific observation is true?

- a. It requires a large number of participants.
- b. It requires specialized equipment, such as video recorders.
- c. It involves recording behavior systematically and objectively.
- d. It must take place in a lab setting.

ANSWER: c

135. Experiments allow researchers to:

- a. study the natural environment.
- b. study the complexity of an individual.
- c. use the scientific method in a cost-effective way.
- d. determine a cause-and-effect relationship.

ANSWER: d

136. When a researcher wants to determine the cause of a particular behavior, the appropriate research method to use is a(n):

- a. case study.
- b. meta-analysis.
- c. experiment.
- d. survey.

ANSWER: c

Chapter 1

137. A *dependent variable* is:

- a. the measured variable that may change depending on manipulation of an independent variable.
- b. any unmeasured variable that is uncontrolled within the context of the experiment.
- c. the variable that is intentionally manipulated by the researcher.
- d. an external variable that cannot be controlled by the researcher.

ANSWER: a

138. An *independent variable* is:

- a. the measured variable that may change depending upon manipulation of a dependent variable.
- b. any unmeasured variable that is uncontrolled within the context of the experiment.
- c. the variable that is intentionally manipulated by the researcher.
- d. an external variable that cannot be controlled by the researcher.

ANSWER: c

139. An example of a dependent variable in an experiment might be:

- a. gender.
- b. blood type.
- c. eye color.
- d. level of depression.

ANSWER: d

140. In an experiment, the group of participants who receive the imposed treatment or special condition is referred to as the _____ group.

- a. independent
- b. dependent
- c. experimental
- d. comparison

ANSWER: c

141. The purpose of an experiment is to find out whether:

- a. an independent variable affects the dependent variable.
- b. a positive correlation can be established.
- c. the dependent variable can be manipulated.
- d. the hypothesis is flawed or influenced by researcher bias.

ANSWER: a

142. "_____ research" is a quick way to study the development of a large group of people.

- a. Experimental
- b. Survey
- c. Cohort-sequential

Chapter 1

d. Longitudinal

ANSWER: b

143. Which of these is a limitation of survey research?

- a. Participants often drop out of the research.
- b. It is expensive and time-consuming.
- c. It requires experimental control.
- d. Participants may be dishonest in their answers.

ANSWER: d

144. The quickest and least expensive way to study development over time is with _____ research.

- a. survey
- b. cross-sectional
- c. longitudinal
- d. experimental

ANSWER: b

145. Dr. Clarke wanted to learn whether ice cream preferences change at different stages of development. For the study, they conducted a one-time assessment in which they asked a group of 5-year-olds, a group of 15-year-olds, and a group of 30-year-olds to identify their ice cream preferences. Dr. Clarke conducted a _____ study.

- a. case
- b. cross-sectional
- c. longitudinal
- d. cross-sequential

ANSWER: b

146. _____ research involves studying the same individuals over time, as their development is repeatedly assessed.

- a. Survey
- b. Cross-sectional
- c. Longitudinal
- d. Observational

ANSWER: c

147. Which is NOT a limitation associated with longitudinal research?

- a. the aging of the participants
- b. losing participants over time
- c. changing historical context
- d. participants becoming aware of the goals of the study and changing their behaviors or answers

ANSWER: a

Chapter 1

148. Which type of research design combines the cross-sectional design with the longitudinal research design?

- a. cross-sequential
- b. longitudinal
- c. meta-sequential
- d. quasi-experimental

ANSWER: a

149. A correlation indicates that there is _____ between two variables.

- a. a causal link
- b. validity
- c. reliability
- d. a relationship

ANSWER: d

150. A correlation is considered to be negative if:

- a. both variables decrease.
- b. both variables increase.
- c. one variable increases, while the other variable decreases.
- d. change in one variable is unrelated to change in the other variable.

ANSWER: c

151. A correlation is considered to be zero if:

- a. one variable increases, while the other decreases.
- b. both variables decrease.
- c. both variables increase.
- d. there is no relationship between the variables.

ANSWER: d

152. The more Joshua eats, the less hungry they feel. The correlation that exists between Joshua's consumption of food and hunger is:

- a. positive.
- b. negative.
- c. zero.
- d. causal.

ANSWER: b

153. The more parents read to their children, the higher their children score on achievement tests. This relationship between parents reading to their children and child achievement represents a(n):

- a. causal relationship.
- b. inverse correlation.
- c. positive correlation.

Chapter 1

d. negative correlation.

ANSWER: c

154. If a researcher finds that there is a correlation between secondhand smoke and children's asthma, they know for sure that:

- a. secondhand smoke causes children's asthma.
- b. secondhand smoke does not cause children's asthma.
- c. prenatal exposure to smoking leads to asthma.
- d. asthma and secondhand smoke have some connection.

ANSWER: d

155. _____ research can be categorized, ranked, or numbered.

- a. Quantitative
- b. Qualitative
- c. Correlational
- d. Observational

ANSWER: a

156. _____ research involves asking open-ended questions and reporting answers in narrative, not numerical, form.

- a. Quantitative
- b. Qualitative
- c. Correlational
- d. Observational

ANSWER: b

157. _____ research reflects cultural and contextual diversity but is also more vulnerable to bias and harder to replicate.

- a. Experimental
- b. Quantitative
- c. Qualitative
- d. Longitudinal

ANSWER: c

158. IRB stands for:

- a. Institutional Review Board.
- b. International Research Board.
- c. Internal Review Board.
- d. Intelligence Research Board.

ANSWER: a

159. The MOST important requirement for all scientists, particularly those studying human development, is to:

Chapter 1

- a. have an advanced degree.
- b. only conduct experimental research.
- c. uphold ethical standards.
- d. avoid using vulnerable populations.

ANSWER: c

160. _____ are essential ethical safeguards.
- a. Promotion, social awareness, and publication
 - b. Independence, privacy, and funding
 - c. Political correctness, scientific advancement, and medical treatment
 - d. Collaboration, replication, and transparency

ANSWER: d

161. To be ethical, researchers should choose topics of study that:
- a. may be researched quickly.
 - b. may be researched inexpensively.
 - c. can help all people live better lives.
 - d. are politically correct.

ANSWER: c

162. The idea that the various identities need to be combined is known as:
- a. social construction.
 - b. intersectionality.
 - c. difference-equals-deficit.
 - d. multi-contextual.

ANSWER: b

163. The fact that our many identities interact with and influence each other is known as:
- a. social construction.
 - b. intersectionality.
 - c. difference-equals-deficit.
 - d. multi-contextual.

ANSWER: b

164. Who first introduced the term intersectionality?
- a. Freud
 - b. Crenshaw
 - c. Piaget
 - d. Erikson

ANSWER: b

Chapter 1

165. In an experiment, the _____ experiences the particular treatment or condition being examined.

- a. control group
- b. experimental group
- c. cohort group
- d. selected group

ANSWER: b

166. In an experiment, the _____ does not experience the particular treatment or condition being examined.

- a. control group
- b. experimental group
- c. cohort group
- d. selected group

ANSWER: a

167. In a study examining the effects of a drug to treat the effects of COVID-19, those who receive the new drug are in the _____, and those who receive a placebo are in the _____.

- a. experimental group; comparison group
- b. comparison group; experimental group
- c. cohort group; control group
- d. comparison group; control group

ANSWER: a

168. Dr. Thomas is conducting an experiment on the effects of exposure to sexualized music on consumers. The participants who are exposed to sexualized music are in the:

- a. control group.
- b. experimental group.
- c. cohort group.
- d. selected group.

ANSWER: b

169. Dr. Tau is conducting an experiment on the effects of exposure to sexualized music on consumers. The participants who are not exposed to sexualized music are in the:

- a. experimental group.
- b. cohort group.
- c. selected group.
- d. comparison group.

ANSWER: d

170. List in order and explain each of the five basic steps of the scientific method.

ANSWER: Step 1: Begin with curiosity. Pose a question based on a theory, prior research, or personal observation. Step 2: Develop a hypothesis, which is a specific prediction that can be tested through research. Step 3: Test the hypothesis. Design and conduct research to gather empirical evidence

Chapter 1

(data). Step 4: Analyze the evidence gathered in the research. Draw conclusions. Using the evidence gathered in the research, conclude whether the hypothesis is supported or refuted. Step 5: Report the results by sharing the data, conclusions, and alternative explanations with other scientists.

171. Explain the nature–nurture debate within developmental science, defining both nature and nurture and providing an example of each.

ANSWER: Nature refers to the influence of genes on a person, and nurture refers to environmental influences on a person. Environmental influences include the health and diet of the embryo's mother and continue for an individual's entire life, including experiences in the family, school, community, and society. An example of nature would be inheriting a gene that predisposes one to addiction. An example of nurture would be having a predisposition to addiction but being raised in a warm, stimulating environment in which parents do not abuse drugs or alcohol, reducing the individual's risk for addiction as a result of not being exposed to abuse or parental addictions. The debate concerns how many of any person's characteristics, behaviors, or emotions are the result of genes and how many are the result of the person's experiences.

172. Explain what intersectionality means and provide an example of how intersectionality would impact prejudice and discrimination.

ANSWER: Intersectionality is the idea that the various identities need to be combined. Our many identities interact with, and influence, each other. Intersectionality brings special attention to people who are simultaneously in several marginalized groups. Systems of social categorization and group power intersect to influence everyone daily. For instance, a person is more likely to experience ageism if they are a person of color who has a disability.

173. Explain differential susceptibility, using the example of maternal depression and children's emotional maturity described in your textbook.

ANSWER: Differential susceptibility refers to the idea that people vary in how sensitive they are to particular experiences. These differences are often genetic. In one study, depression in pregnant women was assessed, and then the emotional maturity of their children was measured. Children who had a particular version of the serotonin transporter gene (5-HTTLPR) were likely to be emotionally immature if their mothers were depressed but more mature than average if their mothers were not depressed.

174. Compare and contrast the critical and sensitive periods. Explain each one and provide an example of each.

ANSWER: A critical period is a time when something must occur to ensure normal development, and a sensitive period is a time when a specific developmental task occurs most easily. An example of a critical period would be the fetus's growing arms and legs and hands and feet—this can occur only at a specific time in utero. Language development is an example of a sensitive period. It occurs most easily at a young age but can still develop at a later age as well.

175. Explain Bronfenbrenner's ecological-systems theory and describe his five systems.

ANSWER: Bronfenbrenner's ecological-systems theory is a perspective on human development that considers all the influences from the various contexts of development. This approach recognizes three nested levels as well as two systems that affect these levels. He believed that each person is affected by their social context. Over the course of his career, he identified five systems. The first is the microsystem (e.g., one's family and peer group), the second is the exosystem (school, clubs, and

Chapter 1

church), and the third is the macrosystem (larger social setting, such as cultural values and economic policies). The fourth system, called the chronosystem, is the role of historical context, and the fifth system, called the mesosystem, is the interaction that occurs between all the other systems.

176. Define cohort, explain its effects, and give an example of one.

ANSWER: A cohort is a group of people born within a few years of each other who move through time together. Cohorts travel through life affected by the interaction of their chronological age with the values, events, technologies, and culture of the historical period. Cohort examples will vary but should show an understanding of a cohort. Examples include the names that parents give their babies, views regarding the legalization of marijuana, and even the war on drugs. The baby-boom generation is an example of a cohort. Other common examples include the Greatest Generation (people who lived through the Depression and World War II) and the Millennials (Generation Y, born between the early 1980s and the early 2000s). Another example would be Generation X, born between the early 1960s and the early 1980s.

177. Explain the term *SES*, including four components of *SES*.

ANSWER: *SES*, or socioeconomic status, is a person's position in society and is determined by education, occupation, neighborhood, and income.

178. Describe *culture* and explain why researchers interested in human development study different cultures.

ANSWER: Culture is the system of shared beliefs, conventions, norms, behaviors, expectations, and symbolic representations that persist over time and prescribe social rules of conduct. Culture is a powerful social construction, or a concept created by a society. Such social constructions affect how people think and act—what they value, praise, ignore, and punish. Different cultures may view the same behaviors or phenomena as either assets or deficits. Therefore, by studying different cultures, researchers can identify which patterns are universal among humans and which occur only in certain cultures. This information provides insights into the effects of different environments.

179. Brenda believes that the terms *culture*, *ethnicity*, and *race* mean the same thing and are interchangeable. Explain why Brenda is incorrect.

ANSWER: Ethnic groups often share a culture, but not necessarily. There are multiple intersecting and interacting dimensions to ethnic identity. People may share ethnicity but differ culturally. For example, people of Irish descent in Ireland, Australia, and North America may come from several ethnic groups. In another example, African-born people in North America typically consider themselves African, but African people in Africa identify with more specific ethnic groups. Race refers to people who are regarded by themselves or by others on the basis of their physical appearance, typically skin color. However, social scientists are convinced that race is a social construction and that color terms exaggerate minor differences. For instance, dark-skinned people with African ancestors have high levels of within-population genetic diversity, and many dark-skinned people whose ancestors were not African share neither culture nor ethnicity with Africans.

180. Define and discuss the term *plasticity* as it relates to human development. What factors influence plasticity in development? Offer at least one example of plasticity that has operated or is operating in your own life.

ANSWER: Plasticity is the molding of human traits while simultaneously maintaining some durability of identity. The concept of plasticity reminds us that human development is an ongoing, ever-changing

Chapter 1

interaction between the body and mind and between the individual and every aspect of their environment. Influences that affect plasticity include culture, upbringing, and genes. Students' examples should relate to some aspect of growth in their individual lives, such as how they—or someone they know—have overcome adversity. For example, they could discuss how a high-functioning person on the autism spectrum can eventually earn a college degree. (The autism remains [durability], but with school and other societal interventions, the person can still achieve traditional milestones.)

181. Describe similarities between Freud's theory of psychosexual development and Erikson's theory of psychosocial development. Next, describe ways in which these theories differ.

ANSWER: Both Freud and Erikson proposed stage theories based on the belief that adult problems echoed childhood conflicts. However, Erikson's psychosocial theory had eight stages, while Freud's psychosexual theory had five. Erikson named two polarities at each stage, and his stages encompassed the entire life span, while Freud's ended after adolescence. Erikson's theory also emphasized the influence of family and culture, while Freud's theory emphasized unconscious sexual urges.

182. Describe *classical* and *operant conditioning*. Next, identify the researcher who proposed the concept of classical conditioning and the researcher who introduced the idea of operant conditioning.

ANSWER: Classical conditioning is the learning process in which a meaningful stimulus is connected with a neutral stimulus that had no special meaning before conditioning. The person gradually reacts to the neutral stimulus with the same behavior as the meaningful one. Pavlov introduced the concept of classical conditioning. In operant conditioning, a person performs some action, and then a response occurs. If the response is pleasurable, the person is likely to repeat the action. If the response is unpleasant, the person is unlikely to repeat the action. Skinner is associated with operant conditioning.

183. Explain *social learning theory*. From where did this theory originate, and what does it emphasize? Next, describe the concept of *modeling*.

ANSWER: Social learning theory is an extension of behaviorism that emphasizes the influence that other people have over a person's behavior. Even without specific reinforcement, every individual learns many things through observation and imitation of other people. Modeling is the central process of social learning, by which a person observes the actions of others and then copies them.

184. Outline cognitive development according to Piaget's theory and explain what Piaget believed facilitates intellectual advancement.

ANSWER: The four stages are sensorimotor, preoperational, concrete operational, and formal operational. According to Piaget, cognitive equilibrium facilitates intellectual advancement because humans seek mental balance. Disequilibrium can cause cognitive growth if people change their thinking through assimilation or accommodation.

185. Nathalia is a child-care teacher who works primarily with toddlers. Most of the children that Nathalia works with are not yet toilet-trained. Explain the advice a psychoanalyst, behaviorist, and cognitive theorist would give Nathalia regarding their approach to toilet training.

ANSWER: Psychoanalytic theory identifies the first year of life as the oral stage, which occurs before the anal

Chapter 1

stage (years 1–3). Thus, psychoanalytic theorists believe that toilet training should be postponed until the child is cognitively, emotionally, and biologically ready—around age 2 for daytime training and age 3 for nighttime dryness.

A behaviorist would argue that toilet training should occur whenever the parent (or adult) wishes to start, not at a particular age. Praise and reward should be used each time the child uses the toilet, as they will increase the likelihood that the child will successfully use the toilet in the future.

A cognitive theorist would suggest that a parent (or adult) wait until the child can understand reasons to urinate and defecate in the toilet.

186. List and describe the four theories that have contributed to our understanding of human development.

ANSWER: Psychoanalytic theory has made scientists aware of the importance of social and emotional experiences during early childhood. Behavioral theory (or behaviorism) has shown the effect that immediate responses and associations have on human learning. Cognitive theory helps scientists understand how intellectual processes and thinking affect people's actions. Evolutionary theory suggests that human impulses need to be recognized before they can be guided.

187. Imagine that you are interested in the relationship between age and reading ability for children of ages 8 to 12 years. Briefly define the cross-sectional design and summarize how you could test this relationship using that design.

ANSWER: A cross-sectional design compares groups of people of one age with at least one other group of people of another age at a specific point in time. Although the people differ in age, they should be similar in other important characteristics. It is faster than a longitudinal study, because all the data are immediately available. Ideally, the participants should be matched at the same socioeconomic level.

To implement a cross-sectional design that examines age and reading ability, first identify two groups of children: 8-year-olds and 12-year-olds. Second, evaluate each individual child's reading ability. Finally, compare the children from each group, and look for differences in reading ability.

188. Define *correlation* and give an example. Can one determine cause and effect from correlations? Explain why or why not.

ANSWER: A correlation exists between two variables when one variable changes (increases or decreases) as the other variable changes. Examples will vary but should illustrate this concept, such as the relationship between increased ice cream sales and higher murder rates. It is impossible to determine cause and effect from correlations, because even though correlations indicate a connection between two variables, they cannot determine the reason for the connection, since no other variables are controlled. In the example above, both ice cream sales and murder rates increase at the same time. Therefore, a third variable—heat—may explain this relationship.

189. Differentiate *quantitative research* from *qualitative research*. What are the benefits of using qualitative research in developmental psychology?

ANSWER: Quantitative research provides data that can be expressed with numbers, such as ranks or scales. Qualitative research, in contrast, relies on open-ended questions, and information is presented in narrative rather than numerical form. Many developmental researchers rely on quantitative research as it reflects cultural and contextual diversity.

Chapter 1

190. What are ethics, and why are ethical standards so important to scientific research?

ANSWER: Ethics are a set of moral principles and specific practices that protect both participants and the integrity of research. Ethical standards provide study participants with the assurance of informed consent; the knowledge that their participation is voluntary and confidential; and the promise that they will not be harmed.

Ethics are also a vital part of the reporting process after the research has been conducted. Reports of findings should be accurate, and the study should be able to be replicated under the same conditions. Collaboration, replication, and transparency are essential ethical safeguards for all scientists.