CHAPTER 2
Studying Child Development

MULTIPLE CHOICE

1. The use of objective, measurable, and repeatable techniques to gather information is called
   a. research.
   b. the scientific method.
   c. research design.
   d. operational validity.

   ANS: B PTS: 1 DIF: E REF: 42
   OBJ: Measuring Attributes and Behaviors MSC: TYPE: C

2. The scientific method dictates that theories must be revised or elaborated as new observations confirm or refute them. This means that
   a. theories should be modified directly after obtaining one set of disconfirming data.
   b. theories are modified only as the researchers who implement them go on to other research areas.
   c. theories should be modified after a good amount of evidence calls for different predictions than those provided by the original theory.
   d. theories are not useful for fueling new research efforts.

   ANS: C PTS: 1 DIF: M REF: 42
   OBJ: Measuring Attributes and Behaviors MSC: TYPE: C

3. Dr. Gupta has performed an experiment based on his theory that children cannot see in color for the first four months of their lives. Using a discrimination task, Gupta finds that children are able to distinguish between two colors that appear to be the same when photographed in black and white. Based on his evidence and the dictates of the scientific method, Dr. Gupta must
   a. completely disregard his original theory.
   b. completely ignore his new findings because he knows his theory is correct.
   c. consider that his original theory may be erroneous, try to replicate his current findings, and revise his theory accordingly.
   d. call all of his colleagues who share his view on the theory and inform them that they too are mistaken.

   ANS: C PTS: 1 DIF: M REF: 42
   OBJ: Measuring Attributes and Behaviors MSC: TYPE: A

4. The specification of a variable in terms of measurable properties is called
   a. the validating assumption.
   b. the reliable assumption.
   c. the operational definition.
   d. variable fixation.

   ANS: C PTS: 1 DIF: E REF: 43
   OBJ: Measuring Attributes and Behaviors MSC: TYPE: C

5. What is the key purpose of operationally defining a variable?
   a. A variable must be defined before one can determine if it is an independent variable or a dependent variable.
   b. A variable cannot provide correlational information until it is operationally defined.
   c. A variable must be defined in terms of unique measurement procedures that lend themselves to only one statistical test.
   d. A variable must be defined in terms of precise measurement procedures that other researchers can use if they wish to repeat the study.

   ANS: D PTS: 1 DIF: M REF: 43
   OBJ: Measuring Attributes and Behaviors MSC: TYPE: C

6. In Clara's honors research project on the effect of video games on aggression in children, the measure of aggression was the number of times physical contact occurred among the children being observed. Clara's measure of aggression is an example of
   a. the operational definition of a variable.
   b. the validity of a measure.
   c. the reliability of a measure.
   d. a control variable.

   ANS: A PTS: 1 DIF: D REF: 43
   OBJ: Measuring Attributes and Behaviors MSC: TYPE: A

7. _____ is the degree to which an assessment procedure actually measures the variable under consideration.
   a. Independence
   b. Dependence
   c. Validity
   d. Reliability

   ANS: C PTS: 1 DIF: M REF: 43
   OBJ: Measuring Attributes and Behaviors MSC: TYPE: C

8. If a self-report measure and a trained observer measure of the same behavior differ from one another, one test might not be as _____ a measure of that behavior as the other test.
   a. valid
   b. reliable
   c. sensitive
   d. scientific

   ANS: A PTS: 1 DIF: M REF: 43
   OBJ: Measuring Attributes and Behaviors MSC: TYPE: A

9. _____ is the degree to which a measure will yield the same results if administered repeatedly.
   a. Validity
   b. Reliability
   c. Independence
   d. Dependence

   ANS: B PTS: 1 DIF: M REF: 43
   OBJ: Measuring Attributes and Behaviors MSC: TYPE: A

10. Angela administered the same personality test on two separate occasions to the same person, but she got very different results the second time. It is likely that Angela's test
    a. does not have high validity.
    b. does not have high test-retest reliability.
    c. has high inter-rater reliability.
    d. has no operationally defined variables.

    ANS: B PTS: 1 DIF: M REF: 43
    OBJ: Measuring Attributes and Behaviors KEY: WWW
    MSC: TYPE: A

11. Alisha and John conducted a study to determine how children pay attention to different television programs. After scoring the videos separately, Alisha's scores were very different from John's scores, indicating

a. low test-retest reliability.
b. high test-retest validity.
c. low inter-rater reliability.
d. high inter-rater validity.

ANS: C PTS: 1 DIF: M REF: 43
OBJ: Measuring Attributes and Behaviors MSC: TYPE: C

12. If a test has high _____ reliability, it should yield similar results on two testing occasions; if a test has high _____ reliability, two or more observers should agree about what they are seeing.

a. test; retest
b. test-retest; intra-rater
c. test-retest; inter-rater
d. operational; functional

ANS: C PTS: 1 DIF: D REF: 43
OBJ: Measuring Attributes and Behaviors MSC: TYPE: C

13. The method of collecting data in which observations of naturally occurring behaviors are observed in real-life settings is called

a. pseudo-experimental observation.
b. naturalistic observation.
c. preservatory observation.
d. setting-dependent observation.

ANS: B PTS: 1 DIF: E REF: 43
OBJ: Methods of Collecting Data MSC: TYPE: C

14. In a naturalistic observation, the researcher tries to

a. record instances of specific behaviors in situations constructed by the researcher.
b. obtain physiological measures in response to changes in stimuli.
c. determine the effects of manipulated variables on a behavior of interest.
d. observe and record behaviors of interest from a natural series of events in the real world.

ANS: D PTS: 1 DIF: M REF: 43
OBJ: Methods of Collecting Data MSC: TYPE: C

15. Jamal wants to study children's everyday interactions with their peers at school without directly asking them any questions or being involved in their activities. Jamal will be conducting a(n)

a. structured observation.
b. unstructured observation.
c. naturalistic observation.
d. intrusive observation.

ANS: C PTS: 1 DIF: D REF: 43
OBJ: Methods of Collecting Data MSC: TYPE: A

16. The tendency of individuals who know they are under observation to alter their natural behavior is termed

a. participant reactivity.
b. observer bias.
c. observer reactivity.
d. participant bias.

ANS: A PTS: 1 DIF: E REF: 44
OBJ: Methods of Collecting Data MSC: TYPE: A

17. Whitney decided to observe Mrs. Henshaw's third-grade class to determine how the subject matter was related to children's participation in class discussions. However, the first couple of times Whitney sat in on Mrs. Henshaw's class, the children were unusually quiet and reluctant to answer Mrs. Henshaw's questions. This is an example of _____, a notable problem with naturalistic observation.

a. observer interference
b. observer bias
c. participant reactivity
d. experimenter bias

ANS: C PTS: 1 DIF: M REF: 44
OBJ: Methods of Collecting Data MSC: TYPE: A

18. One advantage of naturalistic observation is that

a. this type of research never violates ethical guidelines.
b. researchers can see the events and behaviors that precede the target behaviors they are recording.
c. researchers can directly manipulate variables of interest.
d. the researcher can determine cause-and-effect relationships between variables of interest.

ANS: B PTS: 1 DIF: E REF: 44
OBJ: Methods of Collecting Data MSC: TYPE: C

19. Which of the following is a limitation of the naturalistic observation method of data collection?

a. Behavior cannot be adequately measured in a natural setting.
b. The unusual setting often leads to artificial behavior.
c. A multitude of methods are more appropriate for observing the behaviors of children.
d. A lack of experimental control makes the results difficult to interpret.

ANS: D PTS: 1 DIF: E REF: 45
OBJ: Methods of Collecting Data MSC: TYPE: A

20. _____ is a type of study that allows for the recording of behaviors as they occur within a situation constructed by the experimenter.

a. Structured observation
b. Structured interview
c. Constructed observation
d. Fabricated observation

ANS: A PTS: 1 DIF: M REF: 45
OBJ: Methods of Collecting Data MSC: TYPE: C

21. Dr. Liu was interested in studying children's reactions to an adult stealing candy from another adult's desk. To ensure that the same scenario would occur for all subjects, Dr. Liu hired two research assistants to act and she set up a faux reception area next to a play area in her laboratory so she could conduct a(n)

a. structured observation.
b. unstructured observation.
c. naturalistic observation.
d. intrusive observation.

ANS: A PTS: 1 DIF: D REF: 45
OBJ: Methods of Collecting Data MSC: TYPE: A

22. The major advantage to structured observation is the fact that
    a. researchers can devise a controlled setting for the purpose of eliciting the behavior(s) of interest.
    b. researchers can observe child behavior in its most pristine form.
    c. researchers are guaranteed the ability to draw causal conclusions.
    d. researchers can draw only correlational inferences.

    ANS: A PTS: 1 DIF: M REF: 46
    OBJ: Methods of Collecting Data MSC: TYPE: C

23. One disadvantage of structured observations is that
    a. the researcher has little or no control over the variable of interest.
    b. only a limited number of behaviors can be investigated.
    c. a wide range of variables may be influencing the behavior under study.
    d. children may not react in the laboratory as they would in real life.

    ANS: D PTS: 1 DIF: M REF: 46
    OBJ: Methods of Collecting Data MSC: TYPE: C

24. Sometimes children do not behave naturally in a laboratory. The best solution to this problem is to confirm the results
    a. of laboratory studies with other structured setting results.
    b. by conducting similar studies in children's natural environments.
    c. using a questionnaire that participant's parents complete.
    d. by running the same experiment in the same laboratory setting repeatedly and using the same subjects.

    ANS: B PTS: 1 DIF: E REF: 46
    OBJ: Methods of Collecting Data KEY: WWW MSC: TYPE: C

25. When _____ are conducted in the laboratory, it is possible to record physiological measures, such as heart rate and brain waves, which can be very useful in studying _____ because their range of overt responses is more limited.
    a. naturalistic observations; infants
    b. naturalistic observations; adults
    c. structured observations; infants
    d. structured observations; adults

    ANS: C PTS: 1 DIF: M REF: 46
    OBJ: Methods of Collecting Data MSC: TYPE: C

26. A set of standardized questions administered to participants in written form that requires written responses is called a
    a. questionnaire.
    b. concrete interview.
    c. structured interview.
    d. paper-and-pencil test.

    ANS: A PTS: 1 DIF: E REF: 46
    OBJ: Methods of Collecting Data MSC: TYPE: C

27. A researcher who wants to obtain data from a large number of children simultaneously would probably use the

a. clinical method.
b. structured interview method.
c. questionnaire method.
d. correlational design.

ANS: C PTS: 1 DIF: M REF: 46
OBJ: Methods of Collecting Data MSC: TYPE: A

28. A limitation of the questionnaire as a method of gathering information on children's knowledge is that

a. its interpretation is likely to be influenced by the biases of the researcher who is scoring the responses.
b. difficulties with understanding the questions may cause the children to answer them inaccurately.
c. a long period of time is needed to collect enough data to make the interpretation of the results meaningful.
d. it requires a considerable amount of time to score.

ANS: B PTS: 1 DIF: M REF: 46
OBJ: Methods of Collecting Data MSC: TYPE: C

29. _____ is a serious consideration when using interview and questionnaire methods with children, who tend to answer according to what they think the right answer should be in order to be seen in a more favorable light.

a. Reliability
b. Validity
c. Rapport
d. Parental consent

ANS: B PTS: 1 DIF: D REF: 47
OBJ: Methods of Collecting Data MSC: TYPE: C

30. The statistical examination of a large body of existing research results with the goal of assessing the effect of the common central variable is called a

a. correlational study.
b. weighted analysis.
c. grouped examination.
d. meta-analysis.

ANS: D PTS: 1 DIF: E REF: 47
OBJ: Methods of Collecting Data MSC: TYPE: C

31. When performing a meta-analysis, Dr. Ford

a. can be sure that the central variable was defined identically in each study.
b. cannot be sure that the central variable was defined identically in each study.
c. can perform adequate computations from select studies in that particular area.
d. does not need to transcribe the original sets of statistical figures.

ANS: B PTS: 1 DIF: M REF: 47
OBJ: Methods of Collecting Data MSC: TYPE: A

32. In meta-analyses, studies that do not present their data in the form necessary for analysis
    a. may have to be eliminated from the pool of studies.
    b. are always included in tables at the end of the paper.
    c. are readily converted so as to be included in the analyses.
    d. should not prevent the experimenter from continuing as planned.

    ANS: A PTS: 1 DIF: M REF: 47–48
    OBJ: Methods of Collecting Data MSC: TYPE: C

33. A study that assesses whether changes in one variable are accompanied by systematic changes in another variable is called a
    a. relational study.
    b. correlational study.
    c. joint occurrence investigation.
    d. bimodal investigation.

    ANS: B PTS: 1 DIF: E REF: 48
    OBJ: Research Designs MSC: TYPE: C

34. Instead of manipulating variables, in a _____ the investigator obtains measures of two or more characteristics of the participants and determines whether changes in one variable are accompanied by changes in the other.
    a. naturalistic observation
    b. structured observation
    c. correlational study
    d. meta-analysis

    ANS: C PTS: 1 DIF: M REF: 48
    OBJ: Research Designs MSC: TYPE: C

35. A _____ is a relationship in which changes in one variable are accompanied by systematic changes in another variable in the same direction.
    a. correlation
    b. positive correlation
    c. negative correlation
    d. causal correlation

    ANS: B PTS: 1 DIF: E REF: 48
    OBJ: Research Designs MSC: TYPE: C

36. In Dr. Brennan's research, if the value of one variable began to decrease as the value of the other variable began to decrease, this would indicate a _____ correlation.
    a. causal
    b. reliable
    c. negative
    d. positive

    ANS: D PTS: 1 DIF: D REF: 48
    OBJ: Research Designs MSC: TYPE: A

37. Which of the following describes a negative correlation?
    a. As the number of reinforcers for a child's inappropriate behavior decreases, the frequency of inappropriate behavior decreases.
    b. As the time spent playing with a child per day increases, the number of crying episodes per day decreases.
    c. The greater the number of hours that have passed since the last meal, the hungrier a child gets.
    d. A child's weight increases as her or his height increases.

    ANS: B PTS: 1 DIF: D REF: 49
    OBJ: Research Designs MSC: TYPE: A

38. The _____ is the statistic used to describe the strength of the relationship between two variables and its value ranges between _____.

a. quasi-correlation; -1.00 and 0
b. quasi-correlation; -1.00 and 1.00
c. correlation coefficient; -1.00 and 1.00
d. correlation coefficient; 1.00 and -1.00

ANS: D PTS: 1 DIF: D REF: 49
OBJ: Research Designs MSC: TYPE: C

39. The _____ of the correlation coefficient indicates the direction of the relationship, and the _____ of the correlation coefficient indicates the strength of the relationship.

a. sign; number value
b. number value; lag
c. skew; size
d. size; lag

ANS: A PTS: 1 DIF: D REF: 49
OBJ: Research Designs MSC: TYPE: C

40. Regression analysis is a correlation-based statistical technique that allows researchers to make predictions about _____ variables based on one or more _____ variables.

a. negative; positive
b. positive; negative
c. outcome; predictor
d. predictor; outcome

ANS: C PTS: 1 DIF: M REF: 49
OBJ: Research Designs MSC: TYPE: C

41. Researchers must be careful about making statements of cause and effect with respect to correlational studies because

a. correlational studies cannot be tested for significance.
b. correlational designs do not follow the scientific method.
c. correlation coefficients are not recognized as real statistics.
d. correlational studies do not allow the active manipulation of variables.

ANS: D PTS: 1 DIF: M REF: 50
OBJ: Research Designs MSC: TYPE: C

42. For her dissertation, Emily is interested in examining the effects of maternal alcohol consumption on the behavior of newborn infants. For ethical reasons, Emily cannot manipulate the amount of alcohol consumed by pregnant mothers; therefore, she should

a. conduct an experiment with randomly selected mothers and their infants.
b. abandon this research topic and choose some other topic to investigate.
c. conduct a correlational study with alcoholic mothers and their infants.
d. conduct a single-subject study with one volunteer mother and her infant.

ANS: C PTS: 1 DIF: D REF: 50
OBJ: Research Designs MSC: TYPE: A

43. The research method in which one or more independent variables are manipulated to determine the effects on other dependent variables is called

a. experimental design.
b. scientific method.
c. correlational design.
d. variable design.

ANS: A PTS: 1 DIF: M REF: 50
OBJ: Research Designs MSC: TYPE: C

44. In the experimental design, the _____ variable is suspected of causing a change in the _____ variable.

a. dependent; independent
b. independent; dependent
c. independent; control
d. dependent; control

ANS: B PTS: 1 DIF: M REF: 50
OBJ: Research Designs KEY: WWW MSC: TYPE: C

45. The _____ variable is manipulated by the experimenter and is suspected of causing a change in another variable.

a. control
b. random
c. dependent
d. independent

ANS: D PTS: 1 DIF: E REF: 50
OBJ: Research Designs MSC: TYPE: C

46. Professor Brown conducted an experiment to determine if high-carbohydrate diets influence preschool children's activity levels. In this experiment, the children's diets are the _____ variable and the children's activity levels are the _____ variable.

a. dependent; independent
b. independent; dependent
c. random; control
d. continuous; discontinuous

ANS: B PTS: 1 DIF: M REF: 50
OBJ: Research Designs MSC: TYPE: A

47. The use of the principles of chance to assign participants to treatment and control groups for the purpose of avoiding systematic bias is called

a. randomization.
b. random assignment.
c. random dispersion.
d. random variability.

ANS: B PTS: 1 DIF: M REF: 50
OBJ: Research Designs MSC: TYPE: C

48. In random assignment, the group that receives no treatment is called the _____ group.

a. dependent variable
b. experimental
c. causal
d. control

ANS: D PTS: 1 DIF: E REF: 50
OBJ: Research Designs MSC: TYPE: C

49. When two or more groups are present in an experimental design, and in order to help avoid any systematic variation other than that caused by the independent variable on the behavior of interest, the researcher

a. randomly assigns participants to groups.
b. provides a different independent variable for each group.
c. measures a different dependent variable for each group.
d. assigns the same subjects to all groups.

ANS: A PTS: 1 DIF: M REF: 50
OBJ: Research Designs MSC: TYPE: C

50. “Clean” answers about the cause of development can be obtained by studies employing the experimental design because

a. the results are more easily applied to real life.
b. it provides a broad portrait of child development.
c. the experiments are less likely to violate ethical guidelines.
d. cause-and-effect relationships between the variables can be identified.

ANS: D PTS: 1 DIF: M REF: 52
OBJ: Research Designs MSC: TYPE: C

51. One problem often noted about the experimental method is that

a. the behavior of the child in the laboratory may not reflect real-world behavior.
b. it is difficult to assign participants to conditions randomly.
c. cause-and-effect relationships cannot be determined.
d. the independent variable often cannot be manipulated.

ANS: A PTS: 1 DIF: M REF: 52
OBJ: Research Designs MSC: TYPE: C

52. A study in which the experimental manipulations are carried out in a natural setting is called a

a. naturalistic observation.
b. field experiment.
c. structured observation.
d. meta-analysis.

ANS: B PTS: 1 DIF: E REF: 52
OBJ: Research Designs MSC: TYPE: A

53. Field experiments are conducted when the researcher is concerned with

a. the likelihood of recruiting enough subjects to come to the laboratory to participate in an experiment.
b. the need to determine the causes of the behavior of interest.
c. the length of time it would take to complete an experiment.
d. the child’s ability to respond normally to a manipulation in an artificial laboratory situation.

ANS: D PTS: 1 DIF: M REF: 52
OBJ: Research Designs MSC: TYPE: C

54. A _____ is a study in which the assignment of participants to experimental groups is determined by their natural experiences.

a. field experiment
b. meta-analysis
c. quasi-experiment
d. structured observation

ANS: C PTS: 1 DIF: M REF: 53
OBJ: Research Designs MSC: TYPE: C

55. Dr. Kelly was interested in examining the effects of high and low quality after-school programs on children's social competence. Since the children were already attending their respective programs when the project began, Dr. Kelly had to take advantage of the natural separation of the participants into different groups and conduct a

a. quasi-experiment.
b. meta-analysis.
c. naturalistic observation.
d. structured observation.

ANS: A PTS: 1 DIF: D REF: 53
OBJ: Research Designs MSC: TYPE: A

56. When a researcher conducts a quasi-experiment, he or she must be careful how the results are interpreted because

a. participants are not randomly assigned to conditions.
b. participant reactivity is a problem in quasi-experimental designs.
c. there are very few statistical tests to accommodate the data from quasi-experimental designs.
d. the researcher has too much freedom to manipulate the independent variable(s).

ANS: A PTS: 1 DIF: M REF: 53
OBJ: Research Designs MSC: TYPE: C

57. Dr. Peters conducted a study to examine the effects of family income on the types of attachments that infants form with their primary caregivers. Because the participants were not randomly assigned to groups, Dr. Peters

a. cannot conduct any informative statistical analyses.
b. must redo the study with randomly assigned groups.
c. cannot conduct a quasi-experiment.
d. must be cautious when interpreting the results of his study.

ANS: D PTS: 1 DIF: M REF: 53
OBJ: Research Designs KEY: WWW MSC: TYPE: A

58. Researchers who conduct _____ must be very concerned with ruling out alternative explanations for their findings, due to the natural separation between groups.

a. experimental studies
b. causal studies
c. quasi-experiments
d. qualitative studies

ANS: C PTS: 1 DIF: M REF: 53
OBJ: Research Designs MSC: TYPE: C

59. A(n) _____ is an in-depth description of psychological characteristics and behaviors of an individual, often in the form of a narrative.

a. correlational study
b. interview
c. single-case design
d. case study

ANS: D PTS: 1 DIF: E REF: 53
OBJ: Research Designs MSC: TYPE: C

60. A(n) _____ follows only one or a few participants over a period of time, with an emphasis on the systematic collection of data.

a. correlational study
b. interview
c. single-case design
d. case study

ANS: C PTS: 1 DIF: E REF: 54
OBJ: Research Designs MSC: TYPE: C

61. In _____ the emphasis is on the systematic collection of data, whereas in _____ the emphasis is placed on providing a detailed narrative.

a. case studies; single-case designs
b. single-case designs; case studies
c. quasi-experiments; field studies
d. field studies; quasi-experiments

ANS: B PTS: 1 DIF: D REF: 53–54
OBJ: Research Designs MSC: TYPE: C

62. A disadvantage of the single-case design is that

a. researchers are limited in their ability to generalize to a larger group of children.
b. participants cannot be exposed to different treatment conditions.
c. participants must serve as their own control.
d. only one child or a few children can be observed over the course of the experiment.

ANS: A PTS: 1 DIF: D REF: 55
OBJ: Research Designs MSC: TYPE: C

63. Jones administered a memory test to a single group of children when they were two and four years old, and she is planning to give the test to the children a third time when they are six years of age. Dr. Jones is conducting a

a. chronological study.
b. sequential study.
c. longitudinal study.
d. cross-sectional study.

ANS: C PTS: 1 DIF: M REF: 56
OBJ: Strategies for Assessing Developmental Change KEY: WWW
MSC: TYPE: A

64. Which of the following is *not* a disadvantage of longitudinal studies?

a. Participants may get better at taking the tests over time.
b. There is the possibility of an age-history confound.
c. There is the possibility of a cohort effect.
d. They can be rather costly.

ANS: C PTS: 1 DIF: M REF: 56
OBJ: Strategies for Assessing Developmental Change MSC: TYPE: C

65. The _____ is the co-occurrence of historical factors with changes in age that affects the ability to determine the results of a longitudinal study.

a. cohort effect
b. era-specific confound
c. age-history confound
d. cohort-era effect

ANS: C PTS: 1 DIF: M REF: 56
OBJ: Strategies for Assessing Developmental Change MSC: TYPE: C

66. In a ____ study, the investigator examines individuals of different ages at the same point in time.

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

ANS: B PTS: 1 DIF: M REF: 57
OBJ: Strategies for Assessing Developmental Change MSC: TYPE: C

67. Kambe administered a memory test to a group of two-year-olds, a group of four-year-olds, and a group of six-year-olds in the same week. This is an example of a

a. longitudinal study.
b. quasi-experimental design.
c. sequential study.
d. cross-sectional study.

ANS: D PTS: 1 DIF: M REF: 57
OBJ: Strategies for Assessing Developmental Change KEY: WWW
MSC: TYPE: A

68. _____ are characteristics shared by individuals growing up in a given sociohistorical context that can influence developmental outcomes.

a. Cohort effects
b. Age-history confounds
c. Agemate reliability
d. Socio-linked attributes

ANS: A PTS: 1 DIF: E REF: 58
OBJ: Strategies for Assessing Developmental Change MSC: TYPE: C

69. An investigation that tracks groups of children of different ages over a period of time, usually a few years, is called a(n)

a. extended observation.
b. sequential study.
c. longitudinal study.
d. cross-sectional observation.

ANS: B PTS: 1 DIF: E REF: 59
OBJ: Strategies for Assessing Developmental Change MSC: TYPE: C

70. In a study of moral development, two groups of children (age three years and age six years) were tested repeatedly for four years. This is an example of a _____ study.

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

ANS: A PTS: 1 DIF: M REF: 59
OBJ: Strategies for Assessing Developmental Change MSC: TYPE: A

71. Developmental psychologists who make use of the sequential study for assessing developmental change hope to

a. combine the advantages of longitudinal and cross-sectional designs.
b. eliminate the possibility of a cohort effect.
c. eliminate the possibility of an age-history confound.
d. conduct a study in the shortest possible time.

ANS: A PTS: 1 DIF: D REF: 59
OBJ: Strategies for Assessing Developmental Change MSC: TYPE: C

72. Despite challenges, the _____ approach is increasingly becoming part of the arsenal of methods used to study developmental change.

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

ANS: B PTS: 1 DIF: M REF: 60
OBJ: Strategies for Assessing Developmental Change MSC: TYPE: C

73. Which of the following is *not* a method that is utilized specifically for assessing developmental change over time?

a. Cross-cultural
b. Cross-sectional
c. Longitudinal
d. Sequential

ANS: A PTS: 1 DIF: M REF: 57–62
OBJ: Strategies for Assessing Developmental Change MSC: TYPE: C

74. A(n) _____ study compares individuals in different cultural contexts.

a. cross-sectional
b. sociohistorical
c. evolutionary
d. cross-cultural

ANS: D PTS: 1 DIF: M REF: 62
OBJ: Cross-Cultural Studies of Development MSC: TYPE: C

75. Variations in aspects of psychological development across cultures imply that

a. there are no biological similarities across cultures.
b. experiential differences play a large role in the development of those psychological attributes.
c. biological differences play a large role in the development of those psychological attributes.
d. the study was not conducted properly by experimenters.

ANS: B PTS: 1 DIF: D REF: 62
OBJ: Cross-Cultural Studies of Development KEY: WWW
MSC: TYPE: C

76. One problem with cross-cultural research studies is that they

a. must always conclude that similar behavior found in children of different cultures must be biologically determined.
b. can never conclude that similar behavior found in children of different cultures may be biologically determined.
c. can never be of much benefit to developmental psychologists.
d. must make certain that the tasks given to children from different cultures are equated with respect to language and the type of task used.

ANS: D PTS: 1 DIF: M REF: 62
OBJ: Cross-Cultural Studies of Development MSC: TYPE: C

77. In cross-cultural studies, if an observer is an outsider to the cultural group being observed, he or she may provoke atypical behaviors. This is similar to the problem of

a. participant reactivity.
b. observer bias.
c. culture confound.
d. universal anxiety.

ANS: A PTS: 1 DIF: D REF: 62
OBJ: Cross-Cultural Studies of Development MSC: TYPE: C

78. The research approach that includes observations of behavior within the natural environment and interviews with individuals about values and practices within their culture refers to which of the following types of research?

a. Case studies
b. Field experiments
c. Clinical interview
d. Ethnography

ANS: D PTS: 1 DIF: E REF: 63
OBJ: Cross-Cultural Studies of Development MSC: TYPE: C

79. Dr. Abel lived with in a small village in Western Kenya for two years while studying how young children interacted with their peers. He participated in many aspects of village life, including school and family events, and was frequently seen observing children at play. What type of research was Dr. Abel conducting?

a. Ethnographic
b. Experimental
c. Sequential
d. Cross-Sectional

ANS: A PTS: 1 DIF: M REF: 63
OBJ: Cross-Cultural Studies of Development MSC: TYPE: A

80. Ethnography, a particular type of cross-cultural research, is best used to meet which goal?

a. Comparing the similarities and differences of children from various cultural backgrounds.
b. Proving that the aspects of one's culture cause certain behaviors to develop in children.
c. Understanding behaviors and meaning within the context of that particular culture.
d. Preventing participants from reacting abnormally during the study due to the researcher's presence.

ANS: C PTS: 1 DIF: D REF: 63
OBJ: Cross-Cultural Studies of Development MSC: TYPE: C

81. Major advances in the field of _____ , the study of neural and other structures and systems of the brain associated with behavior, have produced insights and generated widespread interest about the relationship between the brain and behavior.

a. cognitive neuroscience
b. developmental neuroscience
c. neurological developementalism
d. neurological psychology

ANS: A PTS: 1 DIF: M REF: 63
OBJ: Neuroscience and Development MSC: TYPE: C

82. The importance of _____ and the possibility of _____ for receiving certain kinds of stimulation have fueled enthusiasm for studying the brain.

a. late experience; critical periods
b. early experience; critical periods
c. social experience; imaging
d. social experience; tomography

ANS: B PTS: 1 DIF: M REF: 63
OBJ: Neuroscience and Development MSC: TYPE: C

83. Which of the following is NOT a new procedure used in studying the brain?

a. PET
b. fMRI
c. MFG
d. ERP

ANS: C PTS: 1 DIF: M REF: 63
OBJ: Neuroscience and Development MSC: TYPE: C

84. At the present time, _____ scans have limited utility for studying normal infants and children because they require injection of a radioactive substance.

a. PET
b. fMRI
c. MFG
d. ERP

ANS: A PTS: 1 DIF: M REF: 63
OBJ: Neuroscience and Development KEY: WWW MSC: TYPE: C

85. _____ are typically used with infants and young children.

a. PETs
b. fMRIs
c. MFGs
d. ERPs

ANS: D PTS: 1 DIF: M REF: 64
OBJ: Neuroscience and Development MSC: TYPE: C

86. _____ do not readily indicate which specific brain regions are responding. This type of information is best obtained with brain images from _____.

a. PETs, MFGs
b. fMRIs, PETs
c. MFGs, ERPs
d. ERPs, fMRI

ANS: D PTS: 1 DIF: D REF: 64
OBJ: Neuroscience and Development MSC: TYPE: C

87. _____ can show with some precision the areas that are activated when the child participates in a particular psychological task.

a. PETs
b. fMRIs
c. MFGs
d. ERPs

ANS: B PTS: 1 DIF: M REF: 64
OBJ: Neuroscience and Development MSC: TYPE: C

88. _____ scans are more difficult to obtain from infants and younger children because they require that participants stay very still for somewhat prolonged periods of time.

a. PET
b. fMRI
c. MFG
d. ERP

ANS: B PTS: 1 REF: 64
OBJ: Neuroscience and Development MSC: TYPE: C

89. Imaging can be especially useful in revealing _____ in the brain functioning of normal and atypical children.

a. gaps
b. controls
c. differences
d. enthusiasm

ANS: C PTS: 1 DIF: M REF: 64
OBJ: Neuroscience and Development MSC: TYPE: C

90. _____ can show which areas of the brain "light up" when adolescents who have experienced trauma are compared with a control group as participants try to inhibit a motor response.

a. Neuro capturing
b. Scan capturing
c. Brain imaging
d. Emotional imaging

ANS: C PTS: 1 DIF: E REF: 64
OBJ: Neuroscience and Development MSC: TYPE: C

91. Being able to see the brain as it functions _____ holds great promise in complementing behavioral studies in childhood development.

a. "powered-down"
b. "lit-up"
c. "off-line"
d. "on-line"

ANS: D PTS: 1 DIF: M REF: 64
OBJ: 6 MSC: TYPE: C

92. _____ is the participant's formal acknowledgement that he or she understands the purposes, procedures, and risks of a study and agrees to participate.

a. Pre-testing
b. Debriefing
c. Participant permission
d. Informed consent

ANS: D PTS: 1 DIF: E REF: 65
OBJ: Ethical Issues in Developmental Research MSC: TYPE: C

93. _____ is the process of providing research participants with a statement of the true goals of a study after initially deceiving them about its purposes.

a. Post-testing
b. Divulging
c. Debriefing
d. Informed consent

ANS: C PTS: 1 DIF: E REF: 65
OBJ: Ethical Issues in Developmental Research MSC: TYPE: C

94. Which of the following is *not* a practice dictated by the American Psychological Association's ethical guidelines for the use of human participants?

a. Participants must give informed consent prior to participating in a research project.
b. Participants have the right to cease participation at any time.
c. Participants must be debriefed at the conclusion of the study.
d. Data collected from participants is not subject to confidentiality guidelines.

ANS: D PTS: 1 DIF: E REF: 65
OBJ: Ethical Issues in Developmental Research MSC: TYPE: C

95. According to the APA Ethical Guidelines for Conducting Research with Children, if in the course of a study the investigator becomes aware of a jeopardy to the child's well-being, the investigator must

a. inform the parents and arrange for assistance for the child.
b. continue with the experiment until the trial is over and then send the child home.
c. end the experiment and call an attorney.
d. discard the data obtained from that particular child and continue to study other participants.

ANS: A PTS: 1 DIF: M REF: 66
OBJ: Ethical Issues in Developmental Research MSC: TYPE: C

96. Which type of research poses more harm to the adolescent's sense of self?
    a. Studies performed when the adolescent was an infant or toddler
    b. Studies that compare the performance of one adolescent to that of another
    c. Studies that encourage mathematical success
    d. Studies performed in a laboratory setting

    ANS: B PTS: 1 DIF: M REF: 66
    OBJ: Ethical Issues in Developmental Research KEY: WWW
    MSC: TYPE: C

97. Which of the following is *not* a question researchers face when deciding whether to reveal information they have learned about participants in their studies?
    a. What are the ethical obligations of the researcher?
    b. What should be done about the issue of confidentiality?
    c. Should the identities of the parents be revealed to the school system?
    d. Should concerns about a child's welfare override the benefits to the research?

    ANS: C PTS: 1 DIF: M REF: 65–66
    OBJ: Ethical Issues in Developmental Research MSC: TYPE: C

98. The Society for Research in Child Development decided that the ethical concerns about the welfare of the children serving as research participants should be the primary concern and override any potential benefits of the research for children in general. This concept is referred to as
    a. debriefing
    b. confidentiality
    c. informed consent
    d. jeopardy

    ANS: D PTS: 1 DIF: M REF: 66
    OBJ: Ethical Issues in Developmental Research MSC: TYPE: C

99. While collecting data on the prevalence of bullying in high school students, Dr. Rapp interviewed many students who had been victims of bullying. One student, Bruce, stated during the interview that he has been considering suicide. Based on research on adolescent judgment, what course of action would most adolescents recommend to Dr. Rapp in this situation?
    a. He should make another appointment with Bruce for the following week.
    b. He should include the interview in his study to further understanding of bullying.
    c. He should break confidentiality and report the suicidal threat.
    d. He should use his best judgment to determine whether Bruce is serious or not.

    ANS: C PTS: 1 DIF: D REF: 66
    OBJ: Ethical Issues in Developmental Research MSC: TYPE: A

100. During the course of her dissertation work on eating disorders, Mary discovered that one of her "recovering" participants was still very ill. Ethical guidelines state that Mary
    a. should keep the participant in her study as long as possible before seeking help for the participant.
    b. must take steps to obtain assistance for the participant despite the risk of losing a participant from the study.
    c. cannot divulge her participant's eating disorder to anyone.
    d. must debrief the participant and dismiss her from the study as she is no longer eligible.

    ANS: B PTS: 1 DIF: D REF: 66
    OBJ: Ethical Issues in Developmental Research KEY: WWW
    MSC: TYPE: A

TRUE/FALSE

1. A factor having no fixed or constant value in a given situation is called a measure.

   ANS: F
   [*measure* should be *variable*]

   PTS: 1 DIF: M REF: 42
   OBJ: Measuring Attributes and Behaviors KEY: WWW
   MSC: TYPE: C

2. Ultimately, researchers are interested in determining the causal relationships among variables.

   ANS: T PTS: 1 DIF: M REF: 42
   OBJ: Measuring Attributes and Behaviors MSC: TYPE: C

3. Measurements of behavior that fluctuate from one observation in time to another or from one observer to another are virtually useless as data.

   ANS: T PTS: 1 DIF: E REF: 43
   OBJ: Measuring Attributes and Behaviors MSC: TYPE: C

4. Observer reactivity is the tendency of researchers to interpret ongoing events as being consistent with their research hypothesis.

   ANS: F
   [*reactivity* should be *bias*]

   PTS: 1 DIF: M REF: 44 OBJ: Methods of Collecting Data
   KEY: WWW MSC: TYPE: C

5. A standardized set of questions administered orally to participants is called a structured questionnaire.

   ANS: F
   [*questionnaire* should be *interview*]

   PTS: 1 DIF: M REF: 46 OBJ: Methods of Collecting Data
   MSC: TYPE: C

6. To determine whether early day care has detrimental effects on infant behavior, Professor Johanson is examining the results of many published research papers on the subject. To make sense of the data, Dr. Johanson is likely to use an experimental technique.

   ANS: F
   [*use an experimental technique* should be *do a meta-analysis*]

   PTS: 1 DIF: D REF: 47 OBJ: Methods of Collecting Data
   MSC: TYPE: A

7. Conducting a meta-analysis can be particularly useful when the results of a number of studies are inconsistent or conflict with one another.

   ANS: T PTS: 1 DIF: M REF: 47
   OBJ: Methods of Collecting Data MSC: TYPE: C

8. A positive correlation is a relationship in which changes in one variable are accompanied by systematic changes in another variable in the opposite direction.

   ANS: F
   [*positive correlation* should be *negative correlation*]

   PTS: 1 DIF: E REF: 49 OBJ: Research Designs
   MSC: TYPE: C

9. If a particular research institute, like much of the effort in developmental science, devotes considerable energy to predicting eventual child outcomes from earlier events and experiences, then it is practicing regression analysis.

   ANS: T PTS: 1 DIF: M REF: 49
   OBJ: Research Designs KEY: WWW MSC: TYPE: A

10. The independent variable is the behavior that the experimenter measures and is the suspected effect of an experimental manipulation.

    ANS: F
    [*independent variable* should be *dependent variable*]

    PTS: 1 DIF: M REF: 50 OBJ: Research Designs
    MSC: TYPE: C

11. A criticism of experimental studies in developmental research is that they do not capture the complexities of age-related changes.

    ANS: T PTS: 1 DIF: M REF: 52
    OBJ: Research Designs MSC: TYPE: C

12. Unlike the case study, the single-case design doesn't involve systematic observations of an individual.

    ANS: F
    [*doesn't involve systematic observations of an individual* should be *introduces experimental treatments to an individual*]

    PTS: 1 DIF: E REF: 54 OBJ: Research Designs
    MSC: TYPE: C

13. Longitudinal studies assess a different sample of participants repeatedly at various points in time, usually over a span of years.

ANS: F
[different sample should be *the same sample*]

PTS: 1 DIF: M REF: 56
OBJ: Strategies for Assessing Developmental Change MSC: TYPE: C

14. Cohort effects are largely associated with cross-sectional studies.

ANS: T PTS: 1 DIF: D REF: 58
OBJ: Strategies for Assessing Developmental Change MSC: TYPE: C

15. Cross-sectional studies sometimes fall short in that they do not assess developmental differences.

ANS: F
[*assess developmental differences* should be *adequately address the processes underlying age-related changes*]

PTS: 1 DIF: D REF: 58
OBJ: Strategies for Assessing Developmental Change MSC: TYPE: C

16. Dr. Fieldhouse is performing a microgenetic study. This means that a key feature of his approach is examining a child's performance while she is engaged in a specific task, making note of any changes in behaviors that occur from trial to trial.

ANS: T PTS: 1 DIF: M REF: 60
OBJ: Strategies for Assessing Developmental Change KEY: WWW
MSC: TYPE: A

17. If common factors are found in children across cultures, this implies that these factors are likely influenced by common biological factors.

ANS: T PTS: 1 DIF: M REF: 62
OBJ: Cross-Cultural Studies of Development MSC: TYPE: C

18. As seen in the results of a study of Argentinian and U.S. mother-child pairs, the transition from one form of play to another may be more influenced by universal processes, than by culture specific experiences.

ANS: F
[*more influenced* should be *less influenced*]

PTS: 1 DIF: M REF: 62
OBJ: Cross-Cultural Studies of Development MSC: TYPE: C

19. Making sure tasks in a cross-cultural study are equivalent can pose a significant challenge for researchers.

ANS: T PTS: 1 DIF: M REF: 62
OBJ: Cross-Cultural Studies of Development MSC: TYPE: C

20. Dr. Hodgkin's cross-culture study, like most cross-cultural studies, aims to document similarities and differences between cultures.

ANS: F
[*similarities and differences between cultures* should be *meaning systems within cultures*]

PTS: 1 DIF: D REF: 62
OBJ: Cross-Cultural Studies of Development MSC: TYPE: A

21. In no other time before now has the brain and its influence on the development of human behavior received more attention.

ANS: T PTS: 1 DIF: E REF: 63
OBJ: Neuroscience and Development MSC: TYPE: C

22. Imaging can be especially helpful in revealing brain functioning of atypical children but not in normal children.

ANS: F
[*but not in normal children* should be *and in normal children*]

PTS: 1 DIF: E REF: 64
OBJ: Neuroscience and Development MSC: TYPE: C

23. There are no noticeable differences in the kinds of information produced by the various new brain recording technologies.

ANS: F
[*no* should be *some*]

PTS: 1 DIF: E REF: 64
OBJ: Neuroscience and Development MSC: TYPE: C

24. Children's vulnerability to risk as they participate in psychological experiments disappears as they grow older.

ANS: F
[*disappears* should be *remains*]

PTS: 1 DIF: M REF: 65–66
OBJ: Ethical Issues in Developmental Research MSC: TYPE: C

25. Older children may be more sensitive to research results that reflect negatively on their family or sociocultural group.

ANS: T PTS: 1 DIF: M REF: 66
OBJ: Ethical Issues in Developmental Research MSC: TYPE: C

26. Dr. Maurice should have a heightened awareness of her participant's reactions to her research because children's adverse reactions can be extremely subtle.

ANS: T PTS: 1 DIF: M REF: 66
OBJ: Ethical Issues in Developmental Research MSC: TYPE: A

27. The overriding guiding principle of the ethical guidelines is that children should not be subjected to any difficult situations and should be treated with all possible respect.

ANS: F
[*difficult situations* should be *physical or mental harm*]

PTS: 1 DIF: M REF: 66
OBJ: Ethical Issues in Developmental Research KEY: WWW
MSC: TYPE: C

SHORT ANSWER

1. Why and how must researchers pay close attention to variables when measuring developmental attributes and behaviors?

   ANS: *Possible Response:* In order for the data collected to be meaningful and useful, the variables must be operationally defined. That is, they must be reliable—consistent across observers or measurements—and valid—an actual measurement of the concept under consideration.

   PTS: 1 OBJ: Measuring Attributes and Behaviors

2. What are the two forms of research result reliability and how are they reached?

   ANS: *Possible Response:* The two forms of research result reliability are test-retest reliability and inter-rater reliability. High test-retest reliability results when a measure is administered repeatedly over a period of time and achieves consistent results. High inter-rater reliability is achieved when two or more observers agree about what they are seeing.

   PTS: 1 OBJ: Measuring Attributes and Behaviors

3. Explain naturalistic observations and discuss the two concerns involved with this approach.

   ANS: *Possible Response:* Naturalistic observations observe children in their everyday environments and systematically record behaviors as they happen. Researchers must be wary of participant reactivity—children may react to the presence of an observer and behave atypically— and observer bias—researchers may interpret behavior to fit his or her hypotheses.

   PTS: 1 OBJ: Methods of Collecting Data

4. What challenges do researchers gathering information using the structured interview or questionnaire technique face?

   ANS: *Possible Response:* Researchers should take into account the fact that children may not always answer questions truthfully. Also, the researcher must be aware that systematic comparisons and unbiased interpretations may be difficult.

   PTS: 1 OBJ: Methods of Collecting Data

5. Briefly explain the correlation research design and its potential relationship patterns.

   ANS: *Possible Response:* A correlation study measures if changes on one variable are accompanied by changes in another. A positive correlation pattern amongst variables means that as the values of one variable change, the scores on the other variable change in the same direction. A negative correlation pattern amongst variables means that as values change on one variable, the scores on the other variable change in the opposite direction. It is also possible for variables to have no relationship pattern.

   PTS: 1 OBJ: Research Designs

6. What is regression analysis and why has it become so important to developmental researchers?

   ANS: *Possible Response:* Regression analysis is a correlation based statistical technique. Researchers use the information provided by correlations to make predictions about outcome variables. Because developmental science often focuses on predicting eventual child outcomes based on earlier events and experiences, regression analysis has become a powerful technique for developmental researchers.

   PTS: 1 OBJ: Research Designs

7. Define the experimental design, including its variables, and explain one of its distinct advantages.

   ANS: *Possible Response:* Experimental design manipulates one or more independent variable—the variable manipulated by the researcher, the suspected cause of the behavior—to observe the effects on the dependent variable—the behavior that is measured, the suspected outcome. This research design has the benefit of being able to measure direct cause-and-effect relationships (internal validity) by controlling the independent variable using random assignment of participants.

   PTS: 1 OBJ: Research Designs

8. What are longitudinal studies? What strengths and weaknesses does this approach have?

   ANS: *Possible Response:* Longitudinal studies test the same sample of participants repeatedly over a period of time. Weaknesses in this approach include cost, substantial research effort, participant test familiarity, and age-history confound. Its strengths include the ability to study the stability of human characteristics as well as to observe the process of development and the factors that precede or follow particular developmental phenomena.

   PTS: 1 OBJ: Strategies for Assessing Developmental Change

9. Explain the microgenetic study and why researchers choose to use it.

   ANS: *Possible Response:* The microgenetic study closely observes a child's performance on a specific task. Careful notes are taken of any changes in behaviors from trial to trial. Researchers may choose this approach if close analysis is necessary in order to understand a precise process.

   PTS: 1 OBJ: Strategies for Assessing Developmental Change

10. Define the cross-cultural study. For what type of developmental research would this approach be best used?

    ANS: *Possible Response:* A cross-cultural study compares individuals from different cultural groups on one or more behavior or pattern of abilities. This approach is useful in answering questions about the universality of psychological development.

    PTS: 1 OBJ: Cross-Cultural Studies of Development

11. What is an ethnographic study and why is it an important methodological tool?

    ANS: *Possible Response:* An ethnography uses observations of individuals within the natural environment combined with interviews with individuals about values and practices within the culture. This methodological tool is important to developmental research because it helps researchers to describe the underlying meaning systems within a given culture.

    PTS: 1 OBJ: Cross-Cultural Studies of Development

12. Neuroscience has grown in importance lately due to the emergence of new technologies. What kinds of things can these techniques measure and what do these measurements help reveal about human development?

    ANS: *Possible Response:* Techniques such as PET scans, fMRIs, and recordings of ERPs respectively measure metabolic activity, blood flow, and electirical events. These measurements provide insight into how and what parts of the brain are functioning when it is processing information.

    PTS: 1 OBJ: Neuroscience and Development

13. What difficulties are related to gathering information via brain imaging?

    ANS: *Possible Response:* Some technologies, such as PET scans, have limited use on infants and children because they involve the injection of a radioactive substance. ERPs do not readily indicate which regions of the brain are actually responding. Finally, fMRI scans require that participants stay very still for a prolonged period of time, which can be very difficult for children.

    PTS: 1 OBJ: Neuroscience and Development

14. Choose one ethical guideline established by the Society for Research in Child Development and explain its purpose as well as its importance to developmental research.

    ANS: *Answers will vary*, but should reflect the information provided in Table 2.4 “Ethical Guidelines in Conducting Research with Children” on p. 66 of the main text.

    PTS: 1 OBJ: Ethical Issues in Developmental Research

15. In what situation is it always ethical for a developmental researcher to break confidentiality or remove a child from a study?

    ANS: *Answers will vary*, but should discuss the guiding concept that all developmental researchers should be most concerned with the welfare of the child.

    PTS: 1 OBJ: Ethical Issues in Developmental Research

ESSAY

1. Research always starts with a question. Pose a hypothetical developmental research question. Then discuss the issues you must pay attention to as a researcher in measuring attributes and behaviors as you attempt to answer your research question.

   ANS: *Answers will vary*, but should include a discussion of the scientific method, the attempt to identify relationships amongst variables, the challenge of operationally defining the variables, validity, reliability, test-restest reliability, and inter-rater reliability.

   PTS: 1 OBJ: Measuring Attributes and Behaviors

2. Choose a hypothetical developmental research question. Then discuss which method of collecting data you would use and why it best suits the nature of your question. Include an assessment of this method's strengths and weaknesses.

   ANS: *Answers will vary*, but should include a thorough description and discussion of one of the following approaches: naturalistic observations, structured observations, interviews, questionnaires, and meta-analytic studies.

   PTS: 1 OBJ: Methods of Collecting Data

3. Imagine that you are researching how children gain confidence in reading skills. You are interested in whether children who read to aloud to their pets or those who read aloud to a peer gain confidence more quickly. Which research design would you use and why? What drawbacks would you still have to consider with this approach?

   ANS: *Answers will vary*, but most likely will include a discussion of the experimental design as it allows for manipulation of independent variables and random assignment of participants, and can reveal a direct cause-and-effect relationship. Concerns include external validity as the experimental design may not yield information about real-life behaviors.

   PTS: 1 OBJ: Research Designs

4. Suppose you wish to find out whether children who play with video games will have better visual-spatial skills. Describe how you would design a correlational and an experimental study to address this question. Which approach is preferable? Why?

   ANS: *Answers will vary*, but should include a description of both the correlational and experimental designs. Arguments for using each approach respectively are useful when conditions do not permit the manipulation of variables (for this reason the correlation approach is not necessary in this situation) and can isolate cause-and-effect relationships (appropriate because this is exactly what the researcher is attempting to do here).

   PTS: 1 OBJ: Research Designs

5. Suppose you wish to examine whether children's conceptualizations of friendship change with development. Describe how you would design a cross-sectional and a longitudinal study to examine this question. Which would you prefer? Explain why.

   ANS: *Answers will vary*, but should include a thorough description and discussion of one of the following approaches: naturalistic observations, structured observations, interviews, questionnaires, and meta-analytic studies.

   PTS: 1 OBJ: Strategies for Assessing Developmental Change

6. Children seem to struggle less in adapting to new technologies than adults do. You are a researcher attempting to study how children learn to use electronic devices. Describe which research tactic you would use and why.

   ANS: *Answers will vary*, but should include a discussion of the microgenetic study and its benefits of offering close observation of the learning processes related to a particular task.

   PTS: 1 OBJ: Strategies for Assessing Developmental Change

7. What type of research questions are best served using the cross-cultural methodology. What type of tasks must researchers avoid using in attempting to collect data? Provide an example.

   ANS: *Answers will vary*, but should include a discussion of cross-cultural studies are useful for analyzing questions of univerasilty in development. Researchers must be careful that all participants are able to complete the task with equal familiarity. For example, when asking children to categorize pictorial representations this task must involve children who have all seen or all never seen two-dimensional representations.

   PTS: 1 OBJ: Cross-Cultural Studies of Development

8. Neuroscience is a fast expanding branch within developmental science. What benefits does cognitive neuroscience have over other fields in studying human development?

   ANS: *Answers will vary*, but should include a discussion of studying structures and systems of the brain associated with behavior, and being able to observe responses "live" as individuals perform tasks, the ability to capture images of the brain's functioning.

   PTS: 1 OBJ: Neuroscience and Development

9. Explain the concept of jeopardy and summarize how this principle applies to children and adolescents participating in research. In particular, what obligations does a researcher have to these participants and under what conditions do these obligations take precedence? Provide examples to illustrate your points.

   ANS: *Answers will vary*, but should include a discussion of jeopardy as the ethical responsibility of researchers to provide assistance and to discuss with parents, guardians, and other researchers any risk to which a child may be susceptible.

   PTS: 1 OBJ: Ethical Issues in Developmental Research

10. Summarize the major factors to consider in obtaining informed consent for children's participation in research. In your answer, discuss those issues pertaining to informed consent that are made more complicated because the participants are infants or children.

    ANS: *Answers will vary*, but should include an explanation of informed consent as explaining the research and its features and affects in a way the child can comprehend. The child can discontinue participation at any time. Because children cannot understand fully the concept of informed consent, parental consent is also necessary.

    PTS: 1 OBJ: Ethical Issues in Developmental Research