Chapter 2 —The Tools of Psychological Research

MULTIPLE CHOICE

1. The multistep technique that generates empirical knowledge through systematic observation of the world is:
   a. logical induction
   b. systematic introspection
   c. hypothesis generation
   d. scientific method

   ANS: D PTS: 1 DIF: factual REF: Psychology for a Reason
   MSC: New

2. Scientific method:
   a. stresses logic as opposed to observation
   b. generates empirical knowledge
   c. tries to detect irregularities
   d. avoids operational definitions

   ANS: B PTS: 1 DIF: factual REF: Psychology for a Reason
   MSC: New

3. Scientific method always begins with:
   a. generation of a hypothesis
   b. clairvoyance
   c. observation
   d. detection of regularities

   ANS: C PTS: 1 DIF: factual REF: Psychology for a Reason
   MSC: New

4. Scientific method always ends with:
   a. generation of a hypothesis
   b. clairvoyance
   c. observation
   d. detection of regularities

   ANS: C PTS: 1 DIF: factual REF: Psychology for a Reason
   MSC: New

5. Which of the following is part of scientific method?
   a. systematic introspection
   b. detect regularities
   c. statistical reasoning
   d. clairvoyance

   ANS: B PTS: 1 DIF: factual REF: Psychology for a Reason
   MSC: New

6. Which of the following is NOT involved in scientific method?
   a. observation
   b. generation of a hypothesis
   c. testing a hypothesis for accuracy
   d. clairvoyance

   ANS: D PTS: 1 DIF: factual REF: Psychology for a Reason

7. Which of the following is part of scientific method?
   a. observation
   b. systematic introspection
   c. statistical reasoning
   d. clairvoyance

   ANS: A PTS: 1 DIF: factual REF: Psychology for a Reason
   MSC: New

8. Which of the following is part of scientific method?
   a. systematic introspection
   b. logical induction
   c. generate a hypothesis
   d. clairvoyance

   ANS: C PTS: 1 DIF: factual REF: Psychology for a Reason
   MSC: New

9. Which of the following is part of scientific method?
   a. systematic introspection
   b. logical induction
   c. clairvoyance
   d. check for accuracy of the hypothesis

   ANS: D PTS: 1 DIF: factual REF: Psychology for a Reason
   MSC: New

10. A researcher who observes a behavior, detects regularities in the behavior, generates a hypothesis about the behavior, and checks the accuracy of his or her predictions through additional observation is utilizing:
    a. the scientific method
    b. naturalistic observation
    c. logical induction
    d. good experimental control

    ANS: A PTS: 1 DIF: factual REF: Psychology for a Reason

11. Dr. Chung is watching parents interact with teachers during their end-of-quarter conferences to discuss their children's grade reports and recording the characteristics of these interactions. Which step in scientific method is this?
    a. clairvoyance
    b. detect regularities
    c. observe
    d. generate a hypothesis

    ANS: C PTS: 1 DIF: applied REF: Psychology for a Reason
    MSC: New

12. Dr. Klein is watching parents interact with teachers during their end-of-quarter conferences to discuss their children's grade reports to see if there are any consistent features in behavior that commonly appear. Which step in scientific method is this?
    a. clairvoyance
    b. detect regularities
    c. observe
    d. generate a hypothesis

    ANS: B PTS: 1 DIF: applied REF: Psychology for a Reason
    MSC: New

13. A hypothesis:
    a. is a conclusion based on the results of a research study
    b. is not necessary if the scientific method is being used
    c. normally wouldn't be generated until a study has been completed
    d. is a prediction about the characteristics of a behavior under investigation

    ANS: D PTS: 1 DIF: factual REF: Psychology for a Reason

14. A prediction about the characteristics of a behavior under investigation is called:
    a. an inferential statistic
    b. an operational definition
    c. a hypothesis
    d. a dependent variable

    ANS: C PTS: 1 DIF: factual REF: Psychology for a Reason

15. Dr. Bores predicts that if the temperature of a room is increased, then individuals are more likely to act aggressively. Dr. Bores' prediction is an example of:
    a. a hypothesis
    b. an independent variable
    c. an operational definition
    d. a dependent variable

    ANS: A PTS: 1 DIF: applied REF: Psychology for a Reason

16. Dr. Sanchez predicts that if the noise level in a room is increased, then individuals are more likely to make errors on a complex task. Dr. Sanchez's prediction is an example of:
    a. an independent variable
    b. an operational definition
    c. a hypothesis
    d. a dependent variable

    ANS: C PTS: 1 DIF: applied REF: Psychology for a Reason

17. Operational definitions:
    a. ensure the results of a scientific investigation will be externally valid
    b. define concepts in terms of how they will be measured
    c. are only necessary in experimental studies
    d. define concepts in abstract terms

    ANS: B PTS: 1 DIF: factual REF: Psychology for a Reason

18. When concepts are defined in terms of the way in which they will be measured, those concepts are said to be:
    a. hypothetical variables
    b. externally valid
    c. internally valid
    d. operationally defined

    ANS: D PTS: 1 DIF: factual REF: Psychology for a Reason

19. Defining intelligence in terms of performance on a psychological test would:
    a. represent an operational definition of intelligence
    b. be a testable hypothesis about intelligence
    c. provide empirical verification of intelligence
    d. violate general research ethics

    ANS: A PTS: 1 DIF: applied REF: Psychology for a Reason

20. Defining TV violence in terms of the number of times someone hits, kicks, or yells at a person or an object within a one-hour episode of a specific show would:
    a. represent an operational definition of TV violence
    b. be a testable hypothesis about TV violence
    c. provide empirical verification of TV violence
    d. violate general research ethics

    ANS: A PTS: 1 DIF: applied REF: Psychology for a Reason
    MSC: New

21. Defining memory in terms of the number of comprehension questions answered correctly after reading a short story would:
    a. represent an operational definition of memory
    b. be a testable hypothesis about memory
    c. provide empirical verification of memory
    d. violate general research ethics

    ANS: A PTS: 1 DIF: applied REF: Psychology for a Reason
    MSC: New

22. Defining wealth in terms of total value of assets minus total value of debts would:
    a. represent an operational definition of wealth
    b. be a testable hypothesis about wealth
    c. provide empirical verification of wealth
    d. violate general research ethics

    ANS: A PTS: 1 DIF: applied REF: Psychology for a Reason
    MSC: New

23. A good operational definition of aggression might be:
    a. behavior intended to harm someone or something
    b. a violent response most often accompanying frustration or anger directed toward someone
    c. the number of times someone hits, kicks, or yells at a person or an object within a 1-hour period
    d. a personality characteristic in which the individual tends to solve problems with violence

    ANS: C PTS: 1 DIF: applied REF: Psychology for a Reason

24. Dr. Boser is studying family relations and plans to define family cohesiveness in terms of the number of weekly activities families do together. Defining family cohesiveness in this way would:
    a. be a testable hypothesis
    b. provide empirical verification of the concept
    c. violate general research ethics
    d. represent an operational definition

    ANS: D PTS: 1 DIF: applied REF: Psychology for a Reason

25. Dr. Pointel is studying aggression and plans to define aggression in terms of the number of times an individual actually strikes another person. Defining aggression in this way would:
    a. be a testable hypothesis
    b. provide empirical verification of the concept
    c. violate general research ethics
    d. represent an operational definition

    ANS: D PTS: 1 DIF: applied REF: Psychology for a Reason

26. Dr. Barant is studying reaction times and plans to define reaction time in terms of the time it takes to press a button on a display panel. Defining reaction time in this way would:
    a. be a testable hypothesis
    b. provide empirical verification of the concept
    c. represent an operational definition
    d. violate general research ethics

    ANS: C PTS: 1 DIF: applied REF: Psychology for a Reason

27. Dr. Beaudette is studying parent-infant attachment and plans to define attachment in terms of the time it takes for a parent to respond to an infant's cries. Defining attachment in this way would:
    a. be a testable hypothesis
    b. provide empirical verification of the concept
    c. represent an operational definition
    d. violate general research ethics

    ANS: C PTS: 1 DIF: applied REF: Psychology for a Reason

28. Dr. Meir is conducting a study and uses heart rate as a measure of general anxiety level. Defining anxiety level in this way would:
    a. represent an operational definition
    b. be a testable hypothesis
    c. provide empirical verification of the concept
    d. violate general research ethics

    ANS: A PTS: 1 DIF: applied REF: Psychology for a Reason

29. Descriptive research refers to:
    a. methods used to assess whether two variables vary together in a systematic way
    b. methods involving active manipulation of some aspect of the environment
    c. any research that uses invasive methods for observing the target behavior
    d. the methods used to describe and observe behavior

    ANS: D PTS: 1 DIF: factual REF: Observing Behavior

30. People's behavior sometimes changes simply because they are being observed. This effect is known as:
    a. external validity
    b. standard deviation
    c. experimental control
    d. reactivity

    ANS: D PTS: 1 DIF: factual REF: Observing Behavior

31. Loss of external validity can result from:
    a. clairvoyance
    b. standard deviation
    c. participant observation
    d. reactivity

    ANS: D PTS: 1 DIF: factual REF: Observing Behavior
    MSC: New

32. Loss of external validity can occur when:
    a. clairvoyance is observed
    b. participant observed is implemented
    c. behavior is observed indirectly
    d. people react to being observed

    ANS: D PTS: 1 DIF: factual REF: Observing Behavior
    MSC: New

33. Frank was a participant in a research study. He felt that his behavior during the study was different from his usual behavior simply because he was being observed. Frank was exhibiting which of the following:
    a. placebo effect
    b. experimental control
    c. naturalistic observation
    d. reactivity

    ANS: D PTS: 1 DIF: applied REF: Observing Behavior

34. Francine was a participant in an observational study, and her behavior changed simply as a result of being watched. Technically, what had occurred?
    a. the placebo effect
    b. experimental control
    c. participation
    d. reactivity

    ANS: D PTS: 1 DIF: applied REF: Observing Behavior
    MSC: New

35. Jiao was a participant in an observational study, and reactivity occurred. Technically, this means:
    a. the researchers reacted to the results of the study before the study was completed
    b. her behavior was changed by the process of being observed
    c. there was a strong public response to publication of the research study
    d. the researchers purposely manipulated the behavior of the research participants

    ANS: B PTS: 1 DIF: applied REF: Observing Behavior
    MSC: New

36. Reactivity occurs when:
    a. researchers react to the results of a study before the study is completed
    b. there is a strong public response to a published research study
    c. an individual's behavior is changed by the process of being observed
    d. researchers attempt to manipulate or change the behavior of research participants

    ANS: C PTS: 1 DIF: factual REF: Observing Behavior

37. The students in Dr. Kent's class are normally very active and there is a high level of classroom participation. However, recently there was an observer in the classroom and the participation level was very low. The change in the responsiveness of the students in Dr. Kent's class illustrates the concept of:
    a. experimental control
    b. negative correlation
    c. reactivity
    d. systematic observation

    ANS: C PTS: 1 DIF: applied REF: Observing Behavior

38. Production at the factory was poor, so management had a team of observers film the workers on the job. The films showed everyone working at top speed, and production was the highest in a year. A likely explanation for the change in the workers' behavior is:
    a. external validity
    b. the placebo effect
    c. reactivity
    d. random assignment

    ANS: C PTS: 1 DIF: applied REF: Observing Behavior

39. External validity refers to:
    a. measuring the results of a behavior, rather than the behavior itself
    b. any research result obtained using noninvasive observation procedures
    c. effectively controlling any potentially confounding variables in an experiment
    d. how well the results of an observation will generalize to other situations

    ANS: D PTS: 1 DIF: factual REF: Observing Behavior

40. When the results of a scientific observation are representative of real life, the results:
    a. have internal validity
    b. have scientific regularity
    c. have been operationally defined
    d. have external validity

    ANS: D PTS: 1 DIF: conceptual REF: Observing Behavior

41. Professor Langerman conducted a study which showed that participants were less efficient when they worked in groups, compared to when they worked alone. Professor Langerman has also noticed that compared to individual projects, students are more likely to hand group projects in late. This suggests that the results Professor Langerman obtained in the efficiency study:
    a. are internally valid
    b. are operationally defined
    c. will not generalize to everyday settings
    d. have external validity

    ANS: D PTS: 1 DIF: applied REF: Observing Behavior

42. Professor Haskins conducted a study which showed that participants remembered new material better when they learned the material and were tested on the material in the same setting. Professor Haskins has also noticed that students tend to do better on term exams when they take the exams in the same room as the one in which the class normally met. This suggests that the results Professor Haskins obtained in the memory study:
    a. are internally valid
    b. are operationally defined
    c. will not generalize to everyday settings
    d. have external validity

    ANS: D PTS: 1 DIF: applied REF: Observing Behavior

43. Naturalistic observation involves:
    a. asking a representative sample of individuals to provide their opinions
    b. recording naturally occurring behavior without any interference
    c. carefully observing a single individual in detail
    d. observing the behavior of animals in a laboratory setting

    ANS: B PTS: 1 DIF: factual REF: Naturalistic Observation

44. When a researcher records naturally occurring behavior, without any interference, the researcher is engaged in:
    a. correlational research
    b. experimentation
    c. naturalistic observation
    d. case study research

    ANS: C PTS: 1 DIF: factual REF: Naturalistic Observation

45. One reason researchers use naturalistic observation is to:
    a. increase reactivity in their results
    b. improve the external validity of their findings
    c. establish cause and effect
    d. increase the standard deviation of their observations

    ANS: B PTS: 1 DIF: factual REF: Naturalistic Observation

46. A researcher who stands on a street corner recording the gender of the driver of each vehicle, and whether or not the driver comes to a complete stop at the stop sign is engaged in:
    a. psychological testing
    b. naturalistic observation
    c. experimentation
    d. case study research

    ANS: B PTS: 1 DIF: applied REF: Naturalistic Observation

47. A researcher who waits by a store exit, recording the general age of each customer, and whether the customer uses the automatic or manual door is engaged in:
    a. naturalistic observation
    b. psychological testing
    c. experimentation
    d. case study research

    ANS: A PTS: 1 DIF: applied REF: Naturalistic Observation

48. It is important to repeat observations in a variety of settings to be certain the:
    a. results generalize
    b. placebo effect has occurred
    c. correlation was accurate
    d. participant observation effect took place

    ANS: A PTS: 1 DIF: conceptual REF: Naturalistic Observation
    MSC: New

49. Participant observation occurs when:
    a. a representative sample of individuals is asked for their opinion
    b. participants in a research study observe and record the behavior of the researcher
    c. an observer attempts to become part of the activities being studied
    d. a single individual is studied in depth

    ANS: C PTS: 1 DIF: factual REF: Naturalistic Observation

50. When a researcher attempts to become part of the activities being studied, in order to unobtrusively observe the behavior under investigation, the researcher is engaging in:
    a. participant observation
    b. case study research
    c. correlational research
    d. survey research

    ANS: A PTS: 1 DIF: factual REF: Naturalistic Observation

51. Channel 6 News heard reports that security regulations were being ignored at the local airport. They had a reporter get a job at the airport so he could find out how security was maintained. This technique is:
    a. a case study
    b. introspection
    c. participant observation
    d. naturalistic observation

    ANS: C PTS: 1 DIF: applied REF: Naturalistic Observation

52. Tess went to a day care center to study social interactions in young children. She used a hidden camera and she told the children she was a student teacher working there for the day. In this case Tess is using:
    a. the case study method of research
    b. survey research
    c. correlational research
    d. participant observation as a method of research

    ANS: D PTS: 1 DIF: applied REF: Naturalistic Observation

53. A group of researchers wanted to investigate allegations of sexual harassment on a company's assembly line. They wanted their observations to be unobtrusive, so they took jobs working on the assembly line and told their fellow employees they were "new hires." In this case the researchers were using:
    a. the case study method of research
    b. survey research
    c. correlational research
    d. participant observation as a method of research

    ANS: D PTS: 1 DIF: applied REF: Naturalistic Observation

54. Researchers who investigate the social habits of teenagers by measuring the content of the litter they leave behind are engaged in:
    a. invasive observation
    b. case study research
    c. indirect naturalistic observation
    d. participant observation

    ANS: C PTS: 1 DIF: applied REF: Naturalistic Observation

55. Museum administrators who determine the popularity of various exhibits by measuring how quickly the floor tiles in front of each exhibit wear out are engaged in:
    a. invasive observation
    b. case study research
    c. indirect naturalistic observation
    d. participant observation

    ANS: C PTS: 1 DIF: applied REF: Naturalistic Observation

56. The results of experimental research can be verified using:
    a. invasive observation
    b. naturalistic observation
    c. clairvoyance
    d. introspection

    ANS: B PTS: 1 DIF: applied REF: Naturalistic Observation
    MSC: New

57. The case study is a research method in which:
    a. the research effort focuses on a single individual
    b. a representative sample of individuals is asked for their opinions
    c. selected individuals are carefully observed in their natural environments
    d. a researcher tries to determine the extent to which two variables influence each other

    ANS: A PTS: 1 DIF: factual REF: Case Studies

58. The research method that focuses on a single individual is:
    a. naturalistic observation
    b. case study research
    c. the survey method
    d. correlational research

    ANS: B PTS: 1 DIF: factual REF: Case Studies

59. Dr. Nelson has been treating a patient for Tourette's syndrome for many years using a variety of therapies. Over the years, he kept detailed records of the patient's behaviors. Dr. Nelson's work is an example of a(n):
    a. experiment
    b. case study
    c. survey
    d. all of these choices

    ANS: B PTS: 1 DIF: factual REF: Case Studies

60. One of the main concerns with the case study method of research is that:
    a. a single case is seldom able to provide a historical perspective
    b. the experiences reported may not be representative of other cases
    c. hypotheses cannot be generated about the origin of the behavior
    d. they cannot be used to study rare or unusual events

    ANS: B PTS: 1 DIF: factual REF: Case Studies

61. Sometimes the observations from case studies fail to generalize to other individuals or situations. This represents a problem with:
    a. reactivity
    b. confounding (third) variables
    c. external validity
    d. internal validity

    ANS: C PTS: 1 DIF: conceptual REF: Case Studies

62. In order to better understand the links between brain function and behavior, Dr. Vannoni carefully observed and extensively questioned two stroke victims. Based on this information, it is most likely that Dr. Vannoni was conducting:
    a. correlational research
    b. survey research
    c. case study research
    d. experimental research

    ANS: C PTS: 1 DIF: applied REF: Case Studies

63. Dr. Greene was investigating the effects of weightlessness on general psychological functioning. Dr. Greene was able to locate three former astronauts who had experienced at least 10 days of weightlessness in space. These individuals were tested extensively and questioned in detail about their experiences. Dr. Greene's research represents:
    a. the correlational method of research
    b. case study research
    c. survey research
    d. the experimental method of research

    ANS: B PTS: 1 DIF: applied REF: Case Studies

64. *Sybil* is a well known book concerning dissociative identity disorder. As an examination of a single individual, the book represents:
    a. case study research
    b. the correlational method of research
    c. survey research
    d. the experimental method of research

    ANS: A PTS: 1 DIF: applied REF: Case Studies
    MSC: New

65. A survey is a research method in which:
    a. selected individuals are carefully observed in their natural environments
    b. a representative sample of individuals is asked for their opinions
    c. a single individual is studied in great detail
    d. a researcher tries to determine the extent to which two variables influence each other

    ANS: B PTS: 1 DIF: factual REF: Surveys

66. The research method in which a large group of individuals is asked for their opinions is:
    a. case study research
    b. correlational research
    c. a survey
    d. naturalistic observation

    ANS: C PTS: 1 DIF: factual REF: Surveys

67. In order to learn whether the people in Newburg opposed or supported the expansion of the town's elementary school, Mayor Tyson randomly selected and interviewed 100 of the town's 10,000 residents. In this instance, the 100 people who were interviewed by the Mayor would be considered to be:
    a. a population
    b. a representative sample
    c. the dependent variable
    d. the independent variable

    ANS: B PTS: 1 DIF: applied REF: Surveys

68. In order to learn whether the people in his state opposed or supported increased speed limits, Representative Simpson randomly surveyed 1,000 of the state's residents. In this instance, the 1,000 people whom Representative Simpson surveyed would be considered to be:
    a. a population
    b. the dependent variable
    c. a representative sample
    d. the independent variable

    ANS: C PTS: 1 DIF: applied REF: Surveys

69. In a random sample:
    a. every tenth person is asked to take part in the study
    b. everyone in the target population has an equal likelihood of being selected
    c. individuals who take part in a survey are all asked different sets of questions
    d. participants with strong opinions are excluded from the survey

    ANS: B PTS: 1 DIF: factual REF: Surveys

70. When everyone in the target population had an equal likelihood of being selected to take part in a survey, the researcher has selected a:
    a. biased sample
    b. random population
    c. nonrepresentative sample
    d. random sample

    ANS: D PTS: 1 DIF: factual REF: Surveys

71. Survey results will be more likely to accurately represent the opinions of the entire population if:
    a. random sampling is used
    b. a control group is used
    c. a double-blind design is used
    d. a single-blind design is used

    ANS: A PTS: 1 DIF: factual REF: Surveys

72. Which of the following occurs when each person in a population has an equal chance of being selected to participate in a research study?
    a. true experiment
    b. random assignment
    c. internal validity
    d. random sampling

    ANS: D PTS: 1 DIF: factual REF: Surveys

73. Naturalistic observation, case studies, and surveys are all examples of:
    a. experimental research
    b. descriptive research
    c. double-blind research designs
    d. single-blind research designs

    ANS: B PTS: 1 DIF: factual REF: Surveys

74. Achievement tests measure an individual's:
    a. current level of knowledge in a particular subject
    b. potential for success in a given area
    c. general intelligence and overall level of cognitive function
    d. basic personality characteristics

    ANS: A PTS: 1 DIF: factual REF: Psychological Tests

75. At the end of her psychology class, Railene took a test designed to assess how well she had mastered the material. Railene's psychology final exam would most likely be considered:
    a. an intelligence test
    b. an achievement test
    c. an aptitude test
    d. a standardized correlational test

    ANS: B PTS: 1 DIF: applied REF: Psychological Tests

76. An aptitude test measures:
    a. basic personality characteristics
    b. current level of knowledge in a particular subject
    c. general intelligence and overall level of cognitive function
    d. potential for success in a given area

    ANS: D PTS: 1 DIF: factual REF: Psychological Tests

77. A test that is designed to measure one's potential success in a given area of study or profession is:
    a. an achievement test
    b. a personality test
    c. an aptitude test
    d. a reactivity test

    ANS: C PTS: 1 DIF: factual REF: Psychological Tests

78. In trying to determine which career would fit best with your abilities and interests, you would probably want to take a test that would measure your potential or talent for specific kinds of activities. The type of test that would measure this sort of potential would be:
    a. an aptitude test
    b. an intelligence test
    c. a personalized case study
    d. an achievement test

    ANS: A PTS: 1 DIF: applied REF: Statistics

79. Measures of central tendency:
    a. provide a value around which scores in a data set tend to cluster
    b. indicate how much the scores in a data set differ from one another
    c. can be used to decide whether the observed behavior in a sample is representative of some larger sample
    d. assess whether two variables vary together in a systematic way

    ANS: A PTS: 1 DIF: factual REF: Statistics

80. The value around which scores in a data set tend to cluster is called:
    a. a measure of variability
    b. a correlational coefficient
    c. the standard deviation
    d. a measure of central tendency

    ANS: D PTS: 1 DIF: factual REF: Statistics

81. The mean for a data set is:
    a. the most frequently occurring score
    b. the middle point in the set of scores
    c. the difference between the largest and smallest scores
    d. the arithmetic average of the set of scores

    ANS: D PTS: 1 DIF: factual REF: Statistics

82. The arithmetic average of a set of scores is:
    a. the mode for the data set
    b. the mean for the data set
    c. the median for the data set
    d. the standard deviation for the data set

    ANS: B PTS: 1 DIF: factual REF: Statistics

83. On a recent quiz Lena and Robert both scored 7 points, Russell scored 2 points, and Carol scored 4 points. For these four students, the mean score on the quiz was:
    a. 7.0 points
    b. 5.0 points
    c. 5.5 points
    d. 4.3 points

    ANS: B PTS: 1 DIF: applied REF: Statistics

84. A researcher timed three rats as they ran through a maze. The first rat took 10 seconds, the second rat took 12 seconds, and the last rat took 17 seconds. For these three rats, the mean time to run the maze was:
    a. 12 seconds
    b. 10 seconds
    c. 17 seconds
    d. 13 seconds

    ANS: D PTS: 1 DIF: applied REF: Statistics

85. The mode for a data set is:
    a. the arithmetic average of the set of scores
    b. the middle point in the set of scores
    c. the most frequently occurring score
    d. the difference between the largest and smallest scores

    ANS: C PTS: 1 DIF: factual REF: Statistics

86. The most frequently occurring score in a set of scores is:
    a. the mean for the data set
    b. the median for the data set
    c. the mode for the data set
    d. the standard deviation for the data set

    ANS: C PTS: 1 DIF: factual REF: Statistics

87. Which of the following is NOT a measure of central tendency?
    a. the mean
    b. the median
    c. the mode
    d. the standard deviation

    ANS: D PTS: 1 DIF: factual REF: Statistics

88. On a recent quiz, Ganesa and Javon both scored 7 points, Armand scored 2 points, and Odette scored 4 points. For these four students, the mode for the quiz was:
    a. 5.0 points
    b. 7.0 points
    c. 5.5 points
    d. 4.3 points

    ANS: B PTS: 1 DIF: applied REF: Statistics

89. Dr. Pharis was studying memory in young children. Five children were asked to remember a list of words. Brad and Beverly each remembered 7 words. Sam remembered 6 words, Sally remembered 5 words, and Chad remembered 4 words. For these five children, the mode for the number of words that were recalled was:
    a. 6.0 words
    b. 6.5 words
    c. 7.0 words
    d. 5.8 words

    ANS: C PTS: 1 DIF: applied REF: Statistics

90. The median for a data set is:
    a. the arithmetic average of the set of scores
    b. the middle point in the set of scores
    c. the most frequently occurring score
    d. the difference between the largest and smallest scores

    ANS: B PTS: 1 DIF: factual REF: Statistics

91. The middle point in a set of scores is:
    a. the median for the data set
    b. the mean for the data set
    c. the mode for the data set
    d. the standard deviation for the data set

    ANS: A PTS: 1 DIF: factual REF: Statistics

92. Gloria is in a class of 15 students. On the most recent exam, 7 students earned scores lower than Carmen's score, and 7 students scored higher than Carmen did. Based on this information, you can conclude that Carmen's score is:
    a. equal to the mode for her class
    b. equivalent to the mean for her class
    c. the same as the median score for her class
    d. the same as all three measures of central tendency for that particular exam

    ANS: C PTS: 1 DIF: applied REF: Statistics

93. Dr. Gates was studying memory in young children. Five children were asked to remember a list of words. Judd and Caroline each remembered 7 words. Byron remembered 6 words, Eve remembered 5 words, and Gunther remembered 4 words. For these five children, the median number of words that were recalled was:
    a. 6.5 words
    b. 6.0 words
    c. 7.0 words
    d. 5.8 words

    ANS: B PTS: 1 DIF: applied REF: Statistics

94. You obtained the following data (1, 1, 2, 4, 7). The mean, median, and mode of these data are:
    a. 2, 1, 4
    b. 3, 2, 1
    c. 2, 3, 1
    d. 1, 4, 2

    ANS: B PTS: 1 DIF: factual REF: Statistics

95. Professor Jackson obtained the following scores on his first exam (100, 99, 99, 81, 72). The mode of these scores is:
    a. 100
    b. 99
    c. 81
    d. 72

    ANS: B PTS: 1 DIF: factual REF: Statistics

96. The measure of central tendency that is most sensitive to extreme scores within the data set is:
    a. the mode
    b. the median
    c. the standard deviation
    d. the mean

    ANS: D PTS: 1 DIF: factual REF: Statistics

97. Liang wants to use a measure of central tendency to summarize the final scores of his basketball team's games for the season, but wants to avoid having a few extreme scores effect the calculation. Therefore, he should avoid using the:
    a. mode
    b. median
    c. mean
    d. standard deviation

    ANS: C PTS: 1 DIF: conceptual REF: Statistics
    MSC: New

98. Kurt wants to use a measure of central tendency to summarize the final scores of his hockey team's games for the season, but wants to avoid having a few extreme scores effect the calculation. Therefore, he should use the:
    a. mode or mean
    b. mode or median
    c. mean or median
    d. standard deviation or mean

    ANS: B PTS: 1 DIF: conceptual REF: Statistics
    MSC: New

99. Paul summarized the final scores of his baseball team's games for the season, but the results were affected by a few extreme scores. This was because he used the:
    a. mode
    b. median
    c. mean
    d. standard deviation

    ANS: C PTS: 1 DIF: conceptual REF: Statistics
    MSC: New

100. The range for a data set is:
    a. the difference between the largest and smallest scores
    b. the arithmetic average of the set of scores
    c. the most frequently occurring score
    d. the middle point in the set of scores

    ANS: A PTS: 1 DIF: factual REF: Statistics

101. The difference between the largest and smallest scores in a set of scores is:
    a. the mean for the data set
    b. the range for the data set
    c. the mode for the data set
    d. the median for the data set

    ANS: B PTS: 1 DIF: factual REF: Statistics

102. Professor Yang observed the following scores in her first exam (100, 93, 81, 60). The range for these scores is:
a. 100
b. 81
c. 40
d. 1

ANS: C PTS: 1 DIF: factual REF: Statistics

103. Professor Pandolfi found the range of scores on his first exam was 40. Which of the following represents the scores on the exam?
a. 100, 90, 60, 50
b. 100, 93, 70, 81
c. 100, 93, 81, 21
d. 100, 93, 81, 60

ANS: D PTS: 1 DIF: factual REF: Statistics

104. Which of the following is a measure of variability?
a. the mean
b. the range
c. the mode
d. the median

ANS: B PTS: 1 DIF: factual REF: Statistics

105. Which of the following is a measure of variability?
a. the mean
b. the standard deviation
c. the mode
d. the median

ANS: B PTS: 1 DIF: factual REF: Statistics

106. The standard deviation for a data set:
a. is the arithmetic average of the set of scores
b. is the middle point in the set of scores
c. is the difference between the largest and smallest scores
d. indicates how much the individual scores vary from the mean

ANS: D PTS: 1 DIF: factual REF: Statistics

107. A student in Professor Hummel's class wants to know if the test scores were all close to the average, or if they were spread out. Professor Hummel could provide the student with:
a. the mean of the test
b. the standard deviation of the test
c. the mode of the test
d. the median of the test

ANS: B PTS: 1 DIF: conceptual REF: Statistics
MSC: New

108. The value that indicates how much the individual scores in a data set vary from the mean is:
    a. the standard deviation for the data set
    b. the average for the data set
    c. the mode for the data set
    d. the median for the data set

    ANS: A PTS: 1 DIF: factual REF: Statistics

109. Descriptive statistics help researchers:
    a. decide whether the behavior observed in a sample is representative of some larger population
    b. determine the likelihood that the pattern in the collected data occurred by chance
    c. describe the data obtained in a research study
    d. measure an individual's current level of knowledge in a particular area

    ANS: C PTS: 1 DIF: factual REF: Statistics

110. Inferential statistics help researchers:
    a. describe the data obtained in a research study
    b. measure a person's potential for success in a given area
    c. decide whether the behavior observed in a sample is representative of some larger population
    d. measure an individual's current level of knowledge in a particular area

    ANS: C PTS: 1 DIF: factual REF: Statistics

111. Inferential statistics help researchers:
    a. describe the data obtained in a research study
    b. determine the likelihood that the pattern in the collected data occurred by chance
    c. measure a person's potential for success in a given area
    d. measure an individual's current level of knowledge in a particular area

    ANS: B PTS: 1 DIF: factual REF: Statistics

112. Dr. Burns is trying to determine whether the behavior that was observed in a sample is representative of behavior in the larger population. To help in making this determination, Dr. Burns should use:
    a. inferential statistics
    b. descriptive statistics
    c. case study analysis
    d. operational definitions

    ANS: A PTS: 1 DIF: applied REF: Statistics

113. Dr. Duggan is trying to determine the likelihood that the pattern of responses in the data collected during a recent study occurred by chance. To help in making this determination, Dr. Duggan should use:
a. inferential statistics
b. descriptive statistics
c. case study analysis
d. operational definitions

ANS: A PTS: 1 DIF: applied REF: Statistics

114. A student in Dr. Wagner's class is asking for the average and range of scores for the test first. The student is asking Dr. Wagner to provide:
a. inferential statistics
b. descriptive statistics
c. case study statistics
d. operational statistics

ANS: B PTS: 1 DIF: conceptual REF: Statistics
MSC: New

115. Professor Rosetti teaches Introductory Psychology at 9:00 AM and 3:00 PM, and is wondering if the morning section did better than the afternoon section on the first test. To be sure, he should use:
a. inferential statistics
b. descriptive statistics
c. case study statistics
d. operational statistics

ANS: A PTS: 1 DIF: conceptual REF: Statistics
MSC: New

116. Paul is searching the internet for different ways he can summarize and describe the data he has collected. He is searching for:
a. case study statistics
b. descriptive statistics
c. inferential statistics
d. operational statistics

ANS: B PTS: 1 DIF: conceptual REF: Statistics
MSC: New

117. You read that there is a statistically significant difference in the rate of depression among men and women. This means that the difference is not likely to be due to:
a. chance
b. reactivity
c. a confounded variable
d. an expectancy effect

ANS: A PTS: 1 DIF: factual REF: Statistics

118. In most psychological studies, the probability that the outcome of research is due to chance must be no higher than:
a. 20%
b. 15%
c. 10%
d. 5%

ANS: D PTS: 1 DIF: factual REF: Statistics
MSC: New

119. When the probability the results of a research study were due to chance is less than 5%, the results are said to be:
a. correlational
b. non-correlational
c. statistically significant
d. statistically insignificant

ANS: C PTS: 1 DIF: factual REF: Statistics
MSC: New

120. When a student's grade is determined by the percentage of items correct on a test, this is called:
a. absolute grading
b. relative grading
c. statistical grading
d. expectancy grading

ANS: A PTS: 1 DIF: factual REF: Practical Solutions
MSC: New

121. When the variability of test scores is the critical factor in determine the grades the students received, which method of grading is being used?
a. absolute grading
b. relative grading
c. statistical grading
d. expectancy grading

ANS: B PTS: 1 DIF: factual REF: Practical Solutions
MSC: New

122. When a student's grade is determined by how the test scores vary among all the students in the class, this is called:
a. absolute grading
b. expectancy grading
c. statistical grading
d. relative grading

ANS: D PTS: 1 DIF: factual REF: Practical Solutions
MSC: New

123. The test grade Wanda receives in Professor Hoffman's class is determined by the percentage of items she gets correct on the test. Professor Hoffman is using the grading method known as:
a. relative grading
b. absolute grading
c. statistical grading
d. expectancy grading

ANS: B PTS: 1 DIF: conceptual REF: Practical Solutions
MSC: New

124. The test grade Jim receives in Professor Evans' class is determined by how well he does on the test in relation to the scores received by the rest of the class. Professor Evans is using the grading method known as:
a. relative grading
b. absolute grading
c. statistical grading
d. expectancy grading

ANS: A PTS: 1 DIF: conceptual REF: Practical Solutions
MSC: New

125. Professor Jenkins wrote a really easy test, and all the students got an A. Professor Jenkins is using the grading method known as:
a. relative grading
b. statistical grading
c. absolute grading
d. expectancy grading

ANS: C PTS: 1 DIF: conceptual REF: Practical Solutions
MSC: New

126. No matter how hard the tests Professor Spinoza writes are, the students getting the top five percent of the class on the test are always sure to get an A. Professor Spinoza is using the grading method known as:
a. absolute grading
b. expectancy grading
c. statistical grading
d. relative grading

ANS: D PTS: 1 DIF: conceptual REF: Practical Solutions
MSC: New

127. Correlational research is a research method in which:
a. a representative sample of individuals is asked for their opinions
b. the research effort focuses on a single case
c. selected individuals are carefully observed in their natural environments
d. a researcher tries to determine the extent to which two variables influence each other

ANS: D PTS: 1 DIF: factual REF: Correlational Research

128. The research method which would be used to assess whether two variables vary together in a systematic way is:
   a. case study research
   b. naturalistic observation
   c. correlational research
   d. the survey method

   ANS: C PTS: 1 DIF: factual REF: Correlational Research

129. As Behavior A decreases, Behavior B decreases by an equal amount. This pattern reflects:
   a. a negative correlation
   b. a zero correlation
   c. a positive correlation
   d. a third variable correlation

   ANS: C PTS: 1 DIF: factual REF: Correlational Research

130. Assessing whether two variables vary together in a systematic way involves computing a mathematical index called a:
   a. correlation coefficient
   b. causal index
   c. variance
   d. deviation

   ANS: A PTS: 1 DIF: factual REF: Correlational Research
   MSC: New

131. Dr. Phillips predicts that if the temperature of a room is increased, then individuals are more likely to act aggressively. This suggests that Dr. Phillips believes room temperature and aggression are:
   a. negatively correlated
   b. uncorrelated
   c. positively correlated
   d. both dependent variables

   ANS: C PTS: 1 DIF: applied Correlational Research

132. If a correlation coefficient has a positive sign, it indicates that:
   a. the two factors being measured move in opposite directions
   b. the two factors being measured move in the same direction
   c. there is no relationship between the two factors being measured
   d. there is a significant relationship between the two factors being measured

   ANS: B PTS: 1 DIF: factual REF: Correlational Research

133. Suppose the correlation between Behaviors X and Y is +.90 This means that:
   a. as Behavior X increases, Behavior Y would be expected to decrease
   b. as Behavior X increases, Behavior Y would be expected to increase
   c. as Behavior X decreases, Behavior Y would be expected to increase
   d. there is no predictable relationship between Behavior X and Behavior Y

   ANS: B PTS: 1 DIF: conceptual REF: Correlational Research

134. As Behavior X increases, Behavior Y is expected to decrease. The correlation between X and Y is:
    a. zero
    b. negative
    c. positive
    d. It is impossible to determine with the information provided.

    ANS: B PTS: 1 DIF: conceptual REF: Correlational Research

135. As Behavior X increases, Behavior Y is expected to increase. The correlation between X and Y is:
    a. zero
    b. negative
    c. positive
    d. It is impossible to determine with the information provided.

    ANS: C PTS: 1 DIF: conceptual REF: Correlational Research

136. Imagine that the personality traits of openness and extroversion have a strong positive correlation. If Thaddeus has a score in openness that is extremely low:
    a. he will probably have a score in extroversion that is quite high
    b. he will probably also have a low score in extroversion
    c. It is impossible to predict how he is likely to score on the extroversion scale without more information.
    d. his extroversion score will probably be about average (neither high nor low)

    ANS: B PTS: 1 DIF: conceptual REF: Correlational Research

137. Dr. Kipp predicts that if the level of lighting on an assembly line is reduced, then worker productivity will increase. This suggests that Dr. Kipp believes lighting level and productivity are:
    a. positively correlated
    b. negatively correlated
    c. uncorrelated
    d. both dependent variables

    ANS: B PTS: 1 DIF: applied REF: Correlational Research

138. If a correlation coefficient has a negative sign, it indicates that:
    a. the two factors being measured move in the same direction
    b. the two factors being measured move in opposite directions
    c. there is no relationship between the two factors being measured
    d. there is a significant relationship between the two factors being measured

    ANS: B PTS: 1 DIF: factual REF: Correlational Research

139. Researchers found a moderate correlation between the length of a customer's driveway and the size of the tips the customer gave pizza delivery people. The longer the driveway, the smaller the tip the delivery person received. The correlation coefficient that most likely represents this relationship would be:
a. +.90
b. –.45
c. +.45
d. –.90

ANS: B PTS: 1 DIF: conceptual REF: Correlational Research

140. Imagine that the personality traits of conscientiousness and extroversion have a strong negative correlation. If Heidi has a score in conscientiousness that is extremely low:
a. she will probably also have a low score in extroversion
b. It is impossible to predict how she is likely to score on the extroversion scale without more information
c. she will probably have a score in extroversion that is quite high
d. her extroversion score would probably be about average (neither high nor low)

ANS: C PTS: 1 DIF: conceptual REF: Correlational Research

141. Of the following, the correlation coefficient that indicates the strongest relationship between the two variables being measured is:
a. –0.89
b. +0.65
c. 0.00
d. +3.46

ANS: A PTS: 1 DIF: applied REF: Correlational Research

142. Which of the following is the maximum value for a correlation coefficient?
a. +0.50
b. +0.90
c. +1.00
d. +5.00

ANS: C PTS: 1 DIF: factual REF: Correlational Research

143. Which of the following is the range of possible values for a correlation coefficient?
a. –5.00 to +5.00
b. –2.00 to +2.00
c. –1.00 to +1.00
d. 0.00 to +1.00

ANS: C PTS: 1 DIF: factual REF: Correlational Research

144. Of the following, the correlation coefficient that indicates the weakest relationship between the two variables being measured is:
   a. +0.01
   b. +0.95
   c. –0.69
   d. –4.50

   ANS: A PTS: 1 DIF: applied REF: Correlational Research

145. Dr. Ep has found that no matter how students score on the first midterm, all the students in her class tend to score between 75% and 80% on the final exam. This suggests that:
   a. there is a relatively strong positive correlation between the scores on the first midterm and the scores on the final exam
   b. there is a relatively strong negative correlation between the scores on the final exam and the scores on the first midterm
   c. the scores on the final exam and the first midterm are not very highly correlated
   d. Dr. Ep should change the final exam so it is more fair to students who are not doing well in the course

   ANS: C PTS: 1 DIF: conceptual REF: Correlational Research

146. When a correlation is not statistically different from zero:
   a. a clear relationship exists between the two measures of interest, but the values move in opposite directions
   b. knowing the value of one measure does not allow you to predict the value of the second measure with an accuracy greater than chance
   c. high values on one measure will generally be associated with low values on the second measure
   d. low values on one measure will generally be associated with low values on the second measure

   ANS: B PTS: 1 DIF: conceptual REF: Correlational Research

147. When Hyacinth creates a scatterplot that shows the number of bystanders who witness an emergency and the length of time for help to be given, the points on the scatterplot fall roughly along a line that slants down and to the right. Based on her scatterplot, Hyacinth can conclude that the number of witnesses and the time to offer help:
   a. are positively correlated
   b. are negatively correlated
   c. are only weakly correlated
   d. have a cause-and-effect relationship

   ANS: B PTS: 1 DIF: applied REF: Correlational Research

148. When George creates a scatterplot that compares achievement test scores and grades in school, the points on the scatterplot fall roughly along a line that slants up and to the right. Based on his scatterplot, George can conclude that achievement test scores and grades in school:
    a. are positively correlated
    b. are negatively correlated
    c. are only weakly correlated
    d. have a cause-and-effect relationship

    ANS: A PTS: 1 DIF: applied REF: Correlational Research
    MSC: New

149. Significant correlations permit researchers to:
    a. determine cause-effect relationships
    b. use one behavior to predict another
    c. identify third variable relationships
    d. assume that the relationship has good external validity

    ANS: B PTS: 1 DIF: factual REF: Correlations and Causality

150. If a researcher found that room temperature and aggression had a strong negative correlation, it would indicate that:
    a. low room temperatures tend to be associated with low levels of aggression
    b. there is no relationship between room temperature and level of aggression
    c. high room temperatures tend to be associated with low levels of aggression
    d. increases in room temperature caused an increase in aggression

    ANS: C PTS: 1 DIF: applied REF: Correlations and Causality

151. If a researcher found that family income and divorce rates had a strong positive correlation, it would indicate that:
    a. low family income tends to be associated with high divorce rates
    b. there is no relationship between family income and divorce rates
    c. decreases in family income cause an increase in divorce rates
    d. high family income tends to be associated with high divorce rates

    ANS: D PTS: 1 DIF: applied REF: Correlations and Causality

152. The main reason it is not possible to determine causality from a correlation is:
    a. the investigator actively manipulated the environment
    b. the presence of potentially uncontrolled factors
    c. researcher bias
    d. reactivity

    ANS: B PTS: 1 DIF: factual REF: Correlations and Causality MSC: New

153. Dr. Clausen finds a strong correlation exists between age at marriage and probability of divorce. He concludes getting married at a young age causes divorce. His conclusion is flawed because of:
   a. active manipulation of the environment
   b. researcher bias
   c. the presence of potentially uncontrolled factors
   d. reactivity

   ANS: C PTS: 1 DIF: conceptual REF: Correlations and Causality MSC: New

154. One of the most important functions of an experiment allows a researcher to establish causality. This factor is:
   a. variance
   b. correlation
   c. reactivity
   d. control

   ANS: D PTS: 1 DIF: factual REF: Explaining Behavior MSC: New

155. *Control* is one of the most important factors in which research method?
   a. participant observation
   b. experimental research
   c. the correlation
   d. systematic introspection

   ANS: B PTS: 1 DIF: factual REF: Explaining Behavior MSC: New

156. In an experiment, the researcher:
   a. changes some aspect of the environment and observes the effect of that change
   b. makes observations of naturally occurring behavior and does not interfere in any way
   c. takes measurements of two variables for every person in the group being observed
   d. examines one person in great detail

   ANS: A PTS: 1 DIF: factual REF: Explaining Behavior

157. Experimental research involves:
   a. assessing the relationship between two variables to determine if they vary together in a systematic way
   b. research focused on a single case in an effort to accumulate in-depth information about an issue
   c. recording and describing naturally occurring behavior without any interference
   d. active manipulation of some aspect of the environment in order to observe the effect on behavior

   ANS: D PTS: 1 DIF: factual REF: Explaining Behavior

158. Active manipulation of some aspect of the environment, in order to observe the effect on behavior, is known as:
a. experimental research
b. correlational research
c. case study research
d. participant observation

ANS: A PTS: 1 DIF: factual REF: Explaining Behavior

159. The primary advantage of experimental research over correlational research is that experiments:
a. are easier to conduct than correlational studies
b. use descriptive statistics rather than inferential statistics
c. can determine cause-effect relationships
d. involve more natural behavior than correlational studies

ANS: C PTS: 1 DIF: conceptual REF: Explaining Behavior

160. Researchers wanted to determine if memory is affected by the way in which material is encoded. One group of research participants formed mental images of the objects to be remembered, while another group repeated the names of the objects to be remembered. The design of this study is consistent with:
a. correlational research
b. an experimental research procedure
c. case study research
d. naturalistic observation

ANS: B PTS: 1 DIF: applied REF: Explaining Behavior

161. Dr. Murawski wants to determine if musical appreciation is affected by listening conditions. One group of research participants listens to music in a darkened room while another group listens in a brightly lit room. The design of this study is consistent with:
a. an experimental research procedure
b. correlational research
c. case study research
d. naturalistic observation

ANS: A PTS: 1 DIF: applied REF: Explaining Behavior

162. The independent variable in an experiment is:
a. the behavior that is observed or measured
b. different for each participant in an experiment
c. the aspect of the environment that is manipulated or changed by the researcher
d. an external, uncontrolled factor that changes during the course of the experiment

ANS: C PTS: 1 DIF: factual REF: Independent and Dependent Variables

163. The aspect of the environment that is manipulated or changed by the researcher during the course of an experiment is:
a. the independent variable
b. the dependent variable
c. a confounding variable
d. a placebo

ANS: A PTS: 1 DIF: factual REF: Independent and Dependent Variables

164. Researchers studying human memory presented people with two lists of words. One list included the names of objects; the other list contained abstract nouns. The researchers found that people could remember more words from the list with object names. In this study, the type of word in the word list (object name or abstract noun) would be:
a. a placebo
b. a confounding variable
c. the dependent variable
d. the independent variable

ANS: D PTS: 1 DIF: applied REF: Independent and Dependent Variables

165. A group of researchers wanted to determine whether animals would be slower in learning a maze when they had been exposed to a particular drug. Half the animals received low doses of the drug, and the other half did not receive the drug. The researchers then counted how many times the animals had to run through the maze before they learned it. In this study, the independent variable is:
a. the amount of drug each animal is given (low dose or none)
b. the type of animal the researcher selects for the study
c. the number of trials it takes for each animal to learn the maze
d. the age of the animals selected

ANS: A PTS: 1 DIF: applied REF: Independent and Dependent Variables

166. Researchers studying plant growth raised plants in two different rooms. One room had soft music playing 24 hours a day; the other room was silent. The researchers found that the plants grew better in the room where the music was played. In this study, the type of room (soft music or silent) would be:
a. the independent variable
b. a placebo
c. the dependent variable
d. a confounding variable

ANS: A PTS: 1 DIF: applied REF: Independent and Dependent Variables

167. Dr. Wilson sets up an experimental study to investigate how self-esteem is affected by feedback from teachers. During the study, third-grade teachers administer a short quiz where each child earns the same score (5 out of a possible 10 points). Half the children are told that this is a very good score, while the rest are told that it is an average score. In this study, the independent variable is:
    a. the child's score on the quiz
    b. the child's level of self-esteem after the quiz has been returned
    c. the type of feedback the child receives (very good or average)
    d. the age of the children who take part in the study

    ANS: C PTS: 1 DIF: applied REF: Independent and Dependent Variables

168. Researchers studying the effects of caffeine tested the reaction times of women who first drank either a beverage with caffeine or a decaffeinated version of the same beverage. In this study, the type of beverage that each participant drinks would be:
    a. a placebo
    b. the dependent variable
    c. the independent variable
    d. a confounding variable

    ANS: C PTS: 1 DIF: applied REF: Independent and Dependent Variables

169. A group of researchers wanted to determine whether people were more likely to follow directions if the person giving the directions was in uniform. An individual wearing a security guard's uniform gave half the participants parking instructions, and half the participants were given parking instructions by an individual wearing street clothes. The researchers recorded whether the participants parked in the spot they were directed to. In this study, the independent variable is:
    a. the parking spot the participant is directed to
    b. the type of clothing worn by the person giving directions (uniform or street clothes)
    c. the number of participants who follow the directions
    d. the gender of the individual providing the directions

    ANS: B PTS: 1 DIF: applied REF: Independent and Dependent Variables

170. Peter believes listening to relaxing music will improve memory. He designs a study in which 15 people listen to relaxing music while studying for 30 minutes and 15 people study in a quiet room for 30 minutes. He measures how much they remember from the material they studied. In this example, the independent variable is:
    a. the amount that the participants remember from the material they study
    b. what the participants hear while they study (relaxing music or no music)
    c. the number of people who take part in the experiment
    d. the length of time the participants were allowed to study the material

    ANS: B PTS: 1 DIF: applied REF: Independent and Dependent Variables

171. The dependent variable in an experiment is:
    a. the aspect of the environment that is manipulated or changed by the researcher
    b. is held constant during the course of an experiment
    c. the behavior that is observed or measured
    d. an external, uncontrolled factor that changes during the course of the experiment

    ANS: C PTS: 1 DIF: medium REF: Independent and Dependent Variables

172. The behavior that is observed or measured during an experiment is:
    a. the dependent variable
    b. the independent variable
    c. a confounding variable
    d. a placebo

    ANS: A PTS: 1 DIF: factual REF: Independent and Dependent Variables

173. Researchers studying human memory presented people with two lists of words. One list included the names of objects; the other list contained abstract nouns. The researchers found that people could remember more words from the list with object names. In this study, the number of words recalled by each participant would be:
    a. a placebo
    b. the dependent variable
    c. a confounding variable
    d. the independent variable

    ANS: B PTS: 1 DIF: applied REF: Independent and Dependent Variables

174. Researchers studying the effects of alcohol consumption tested the physical coordination skills of 21-year-old men who were first assigned to drink a beverage with 4, 2, or 0 ounces of alcohol in the laboratory. In this study, the dependent variable would be:
    a. the age of the research participants
    b. the amount of alcohol consumed
    c. the physical coordination skills of the research participants
    d. the length of time that elapses between drinking the alcohol and taking the test

    ANS: C PTS: 1 DIF: applied REF: Independent and Dependent Variables

175. Researchers studying the effects of caffeine tested the reaction times of women who first drank either a beverage with caffeine or a decaffeinated version of the same beverage. In this study, the reaction time of each participant would be:
    a. a placebo
    b. a confounding variable
    c. the independent variable
    d. the dependent variable

    ANS: D PTS: 1 DIF: applied REF: Independent and Dependent Variables

176. A group of researchers wanted to determine whether people would eat more food in a cool room than in a hot room. Half the participants ate in a warm room (75°F) and half the participants ate in a cool room (65°F). The researchers then measured how much food was consumed in each of the two rooms. In this study, the dependent variable is:
    a. the temperature of the room (75°F or 65°F)
    b. the type of food the researcher selects for the study
    c. the amount of food that is consumed
    d. how hungry the participants are at the start of the study

    ANS: C PTS: 1 DIF: applied REF: Independent and Dependent Variables

177. Dr. Wilson sets up an experimental study to investigate how self-esteem is affected by feedback from teachers. During the study, third-grade teachers administer a short quiz where each child earns the same score (5 out of a possible 10 points). Half the children are told that this is a very good score, while the rest are told that it is an average score. In this study, the dependent variable is:
    a. the type of feedback the child receives (very good or average)
    b. the child's score on the quiz
    c. the age of the children who take part in the study
    d. the child's level of self-esteem after the quiz has been returned

    ANS: D PTS: 1 DIF: applied REF: Independent and Dependent Variables

178. Researchers studying plant growth raised plants in two different rooms. One room had soft music playing 24 hours a day; the other room was silent. The researchers found that the plants grew better in the room where the music was played. In this study, the amount that the plants grew would be:
    a. the dependent variable
    b. a placebo
    c. a confounding variable
    d. the independent variable

    ANS: A PTS: 1 DIF: applied REF: Independent and Dependent Variables

179. A group of researchers wanted to determine whether people would help someone in distress more quickly if they were alone. Half the participants were waiting alone in a room when they heard a cry for help, and half the participants were waiting with four other people when they heard a cry for help. The researchers then measured how long it took for help to be offered. In this study, the dependent variable is:
    a. the number of other people in the room (0 or 4)
    b. how long it takes for help to be offered
    c. how loud the cry for help is
    d. the age of the participants in the study

    ANS: B PTS: 1 DIF: applied REF: Independent and Dependent Variables

180. In an experimental study, the group of participants exposed to the experimental treatment or the changed conditions is:
   a. the control group
   b. the random group
   c. the dependent variable group
   d. the experimental group

   ANS: D PTS: 1 DIF: factual REF: Experimental Control

181. In an experimental study, the experimental group consists of the participants:
   a. who are not exposed to the experimental treatment
   b. who are exposed to the experimental treatment or the changed conditions
   c. who are not exposed to the dependent variable
   d. who score the highest in the study

   ANS: B PTS: 1 DIF: factual REF: Experimental Control

182. A group of researchers wanted to determine whether animals would be slower in learning a maze when they had been exposed to a particular drug. Half the animals received low doses of the drug, and the other half did not receive the drug. In this study, the experimental group is:
   a. the animals who did not receive the drug
   b. the animals who ran the maze the fastest
   c. the animals who received the low doses of the drug
   d. all the animals who took part in the study

   ANS: C PTS: 1 DIF: applied REF: Experimental Control

183. In an experiment designed to investigate memory processes, one group of participants was given special instructions and asked to create mental pictures of each item on a list of items to be remembered. Another group of participants was given the same list but received no special instructions about how to remember the items. In this study, the experimental group is:
   a. the participants who received the special instructions
   b. the participants who received no special instructions
   c. the participants who remembered the fewest items
   d. all the participants in the study

   ANS: A PTS: 1 DIF: applied REF: Experimental Control

184. Researchers studying the effects of caffeine on reaction times had participants drink either a beverage that contained caffeine or a decaffeinated version of the same beverage. In this study, the experimental group is:
   a. the participants who drink the decaffeinated beverage
   b. the participants with the slowest reaction times
   c. all the people who take part in the study
   d. the participants who drink the beverage with caffeine

   ANS: D PTS: 1 DIF: applied REF: Experimental Control

185. Roland and Tabitha both take part in a research study that is investigating the effects of sleep deprivation on reaction time. Roland is kept awake for 24 hours straight, while Tabitha follows her normal sleep routine. In this study, Roland is part of:
a. the control group
b. the hypothesis group
c. the experimental group
d. the dependent variable group

ANS: C PTS: 1 DIF: applied REF: Experimental Control

186. In an experimental study, the group of participants who are not exposed to the experimental treatment is:
a. the experimental group
b. the random group
c. the dependent variable group
d. the control group

ANS: D PTS: 1 DIF: factual REF: Experimental Control

187. The control group in an experiment is the group that:
a. is not exposed to the dependent variable in the study
b. receives the lowest score on the dependent variable
c. receives some special treatment in regard to the independent variable
d. does not receive any special treatment in regard to the independent variable

ANS: D PTS: 1 DIF: factual REF: Experimental Control

188. A group of researchers wanted to determine whether children behave more aggressively after watching violent television programming. Half the children in the study watch a violent television show; the other children watch a nonviolent television program. In this study, the control group is:
a. the children who watch the violent show
b. the children who watch the nonviolent program
c. the children who behave the most aggressively at the end of the study
d. all the children who take part in the study

ANS: B PTS: 1 DIF: applied REF: Experimental Control

189. Researchers who were studying the effects of music on plant growth raised plants in two different rooms. One room had soft music playing 24 hours a day; the other room had no music. In this study, the control group is:
a. the plants in the room with no music
b. the plants in the room with the music
c. the plants that grow the most during the study
d. all the plants used during the study

ANS: A PTS: 1 DIF: applied REF: Experimental Control

190. Researchers studying the effects of alcohol consumption tested the physical coordination skills of 21-year-old men who were first assigned to drink a beverage with either 2 ounces of alcohol or no alcohol. In this study, the control group is:
a. the men who drink the nonalcoholic beverage
b. the men who drink the alcoholic beverage
c. the men who have the slowest reaction times
d. all the men who take part in the study

ANS: A PTS: 1 DIF: applied REF: Experimental Control

191. Dr. Krenshaw believes that people who are under stress will develop more colds than people who are not under stress. When he randomly selects 20 participants and exposes them to high levels of stress, he finds that 17 of the participants develop colds. Based on these results, Dr. Krenshaw concludes that stress causes an increase in the number of colds a person experiences. His reasoning may be flawed because in this study:
a. there was no dependent variable
b. there was no control group for comparison
c. he didn't formulate a hypothesis before he collected his data
d. he didn't measure the independent variable when the study ended

ANS: B PTS: 1 DIF: conceptual REF: Experimental Control

192. Kyle believes that patrons in his bar will be more likely to leave a tip if the tip jar already has some money in it, compared to when the tip jar is completely empty. To test this belief, he has the tip jar empty about half the time when a customer approaches the bar; the rest of the time he ensures there is at least $5.00 in the jar when a customer approaches. In Kyle's experiment, the patrons who see the empty tip jar are part of:
a. the control group
b. the hypothesis group
c. the experimental group
d. the dependent variable group

ANS: A PTS: 1 DIF: applied REF: Experimental Control

193. A confounding variable is:
a. the dependent variable in an experimental study
b. a factor that is held constant during an experimental study
c. a variable that is defined in terms of how it will be measured
d. an uncontrolled variable that changes systematically with the independent variable

ANS: D PTS: 1 DIF: factual REF: Experimental Control

194. Any uncontrolled variable that changes systematically with the independent variable is:
a. a dependent variable
b. a correlation coefficient
c. a theoretical construct
d. a confounding variable

ANS: D PTS: 1 DIF: factual REF: Experimental Control

195. A confounding variable in an experiment is an uncontrolled variable that:
   a. increases the internal validity of the experiment
   b. reduces the problem of expectancy effects
   c. is produced by random assignment
   d. varies systematically with the independent variable

   ANS: D PTS: 1 DIF: factual REF: Experimental Control

196. Jason wants to design a good experiment and be sure there are no uncontrolled variables that change along with the independent variable. In other words, Jason wants to avoid:
   a. independent variables
   b. dependent variables
   c. confounding variables
   d. control variables

   ANS: C PTS: 1 DIF: conceptual REF: Experimental Control
   MSC: New

197. Dale wants to design a good experiment and be sure there are no confounding variables. In other words, Dale wants to avoid:
   a. an uncontrolled variable that changes systematically with the independent variable
   b. an uncontrolled variable that changes systematically with the dependent variable
   c. a controlled variable that changes systematically with the independent variable
   d. a controlled variable that changes systematically with the dependent variable

   ANS: A PTS: 1 DIF: conceptual REF: Experimental Control
   MSC: New

198. The extent to which an experiment has effectively controlled for confounding variables is called:
   a. operational validity
   b. internal validity
   c. external validity
   d. central validity

   ANS: B PTS: 1 DIF: factual REF: Experimental Control
   MSC: New

199. An experiment that allows for the determination of causality has:
   a. operational validity
   b. external validity
   c. internal validity
   d. central validity

   ANS: C PTS: 1 DIF: factual REF: Experimental Control
   MSC: New

200. An experiment that does not effectively control for confounding variables lacks:
a. operational validity
b. external validity
c. central validity
d. internal validity

ANS: D PTS: 1 DIF: factual REF: Experimental Control
MSC: New

201. An experiment that does not allow for the determination of causality lacks:
a. internal validity
b. external validity
c. operational validity
d. central validity

ANS: A PTS: 1 DIF: factual REF: Experimental Control
MSC: New

202. Jennifer wants to design a good experiment and be sure it has internal validity. In other words, Jennifer wants to avoid:
a. independent variables
b. dependent variables
c. confounding variables
d. control variables

ANS: C PTS: 1 DIF: conceptual REF: Experimental Control
MSC: New

203. Dwayne wants to design a good experiment and be sure it has internal validity. In other words, Dwayne wants to avoid:
a. uncontrolled variables that changes systematically with the independent variable
b. uncontrolled variables that changes systematically with the dependent variable
c. controlled variables that changes systematically with the independent variable
d. controlled variables that changes systematically with the dependent variable

ANS: A PTS: 1 DIF: conceptual REF: Experimental Control
MSC: New

204. Donald received a poor grade on his last exam. In an attempt to improve his performance on the next exam, he has started to use a different note-taking method, he has enrolled in a study skills class, and he has moved to a seat that is closer to the front of the class. If Donald's score goes up on the next exam, it will be hard for him to figure out why because:
a. he failed to use a double-blind procedure
b. the three actions he took to raise his grade are confounded with each other
c. none of the actions he took is generally related to grades in school
d. he doesn't have a research hypothesis

ANS: B PTS: 1 DIF: conceptual REF: Experimental Control

205. Fred's advisor noticed that he had not included the same words in each list used to test whether the color of ink affects memory. This meant the lists differed in both content and ink color. Fred won't be able to easily interpret his results because:
a. reactivity has occurred
b. his data have poor external validity
c. his experiment included a confounding variable
d. he did not use a control group

ANS: C PTS: 1 DIF: conceptual REF: Experimental Control

206. The technique that ensures each participant has an equal chance of being assigned to any of the conditions in the experiment is:
a. random assignment
b. correlational assignment
c. controlled assignment
d. reactive assignment

ANS: A PTS: 1 DIF: factual REF: Experimental Control
MSC: New

207. Random assignment ensures:
a. correlations are accurate
b. each participant in an experiment has an equal chance of being assigned to a any condition
c. research participants do not know one another
d. each member of a population has an equal chance of being selected for a research study

ANS: B PTS: 1 DIF: factual REF: Experimental Control
MSC: New

208. Random assignment:
a. eliminates differences among people
b. ensures research participants do not know one another
c. does not eliminate differences among people
d. ensures research participants know one another

ANS: C PTS: 1 DIF: factual REF: Experimental Control
MSC: New

209. Random assignment to either the control or experimental group is an important aspect of experimental procedures. Random assignment is used to ensure that:
a. a representative sample of participants is initially selected
b. expectancy effects are minimized within the experiment
c. the independent variable will be reliable and valid
d. the experimental group and the control group are as similar as possible

ANS: D PTS: 1 DIF: conceptual REF: Experimental Control

210. If random assignment is used, researchers assume that differences in group performance are not due to:
    a. experimenter expectancies about the experiment
    b. differences in the personal characteristics of subjects in each group
    c. subject expectancies about the experiment
    d. the environmental conditions that are intentionally manipulated in the experiment

    ANS: B PTS: 1 DIF: factual REF: Experimental Control

211. Jeff plans to conduct a small experiment with some of his friends. He writes the ten names on slips of paper and mixes them up in a bowl. He then draws the names one at a time. The first five names are assigned to the experimental group, and the last five names are assigned to the control group. In this example, Jeff's procedure illustrates:
    a. a single-blind research design
    b. the use of random assignment
    c. correlational research
    d. informed consent

    ANS: B PTS: 1 DIF: applied REF: Experimental Control

212. A placebo is used to:
    a. create equal expectancies in the experimental and control groups
    b. increase expectancies in the experimental group
    c. decrease expectancies in the experimental group
    d. create different expectancies in the experimental and control groups

    ANS: A PTS: 1 DIF: conceptual REF: Expectancies and Biases in Experimental Research MSC: New

213. A placebo is:
    a. an active drug that is given to the experimental group in a research study
    b. only used in correlational research studies
    c. an inactive or inert substance that appears to be a real drug
    d. is not necessary if a single-blind research procedure is used

    ANS: C PTS: 1 DIF: factual REF: Expectancies and Biases in Experimental Research

214. An inactive or inert substance that appears to be a real drug is called:
    a. a confounding variable
    b. a placebo
    c. a random variable
    d. a theoretical construct

    ANS: B PTS: 1 DIF: factual REF: Expectancies and Biases in Experimental Research

215. If a placebo is used, researchers assume that differences in group performance are not due to:
a. experimenter expectancies about the experiment
b. differences in the personal characteristics of subjects in each group
c. subject expectancies about the experiment
d. the environmental conditions that are intentionally manipulated in the experiment

ANS: C PTS: 1 DIF: factual REF: Expectancies and Biases in Experimental Research

216. A researcher was investigating the link between memory and caffeine. Half the participants were given a caffeinated beverage before being asked to memorize a word list; the other participants were given a decaffeinated beverage before being asked to memorize the same word list. In this research study, the decaffeinated beverage would be:
a. a placebo
b. a confounding variable
c. the dependent variable
d. an inferential variable

ANS: A PTS: 1 DIF: applied REF: Expectancies and Biases in Experimental Research

217. In a single-blind study:
a. each participant is part of both the experimental and control group
b. all confounding variables are eliminated from the study
c. both the experimental and control groups receive placebos
d. research participants are uncertain whether they are in the experimental or control group

ANS: D PTS: 1 DIF: factual REF: Expectancies and Biases in Experimental Research

218. Which type of study would control for participant expectations, but not expectations on the part of the investigator?
a. a total-blind study
b. a partial-blind study
c. a single-blind study
d. a double-blind study

ANS: C PTS: 1 DIF: conceptual REF: Expectancies and Biases in Experimental Research MSC: New

219. When research participants are uncertain whether they are in the experimental or control group, but the researchers are aware which group each participant is in, the research study utilizes:
a. a double-blind design
b. a single-blind design
c. confounded variables
d. a triple-blind design

ANS: B PTS: 1 DIF: factual REF: Expectancies and Biases in Experimental Research

220. The main advantage of a single-blind research study is that it minimizes the effect of:
a. expectations by both the experimenter and the participants
b. expectations in the participants
c. the independent variable
d. any confounding variables

ANS: B PTS: 1 DIF: factual REF: Expectancies and Biases in Experimental Research

221. Pamela signed up for a study that would test the effects of a new experimental drug. She knew that only half the participants would actually receive the drug, while the rest would receive a placebo. However, Pamela is unsure whether the drug she is receiving is real. Pamela is taking part in:
a. a single-blind research study
b. an unethical experiment
c. a case study
d. a study with no external validity

ANS: A PTS: 1 DIF: applied REF: Expectancies and Biases in Experimental Research

222. Experimenter expectancy effects occur when the researcher:
a. knows the experimental hypothesis that is being tested
b. uses a double-blind experimental design
c. fails to use random assignment in an experiment
d. unknowingly influences the results of a study in subtle ways

ANS: D PTS: 1 DIF: factual REF: Expectancies and Biases in Experimental Research

223. One method that can control for experimenter expectancy effects is to use:
a. a single-blind procedure
b. two control groups
c. random assignment
d. a double-blind procedure

ANS: D PTS: 1 DIF: factual REF: Expectancies and Biases in Experimental Research

224. Neither the subjects nor the experimenter recording the data knows which subjects belong to a particular group. This is an example of:
a. a confounding variable
b. random assignment
c. a double-blind experiment
d. a single-blind experiment

ANS: C PTS: 1 DIF: conceptual REF: Expectancies and Biases in Experimental Research

225. Meredith is a doctor whose patients are participants in a research study testing a new cholesterol medication. Neither Meredith nor her patients knows whether the patients are receiving the new experimental drug or a placebo. This is an example of:
a. a confounding variable
b. random assignment
c. a double-blind experiment
d. a single-blind experiment

ANS: C PTS: 1 DIF: conceptual REF: Expectancies and Biases in Experimental Research

226. Which type of study would control for both participant expectations and expectations on the part of the investigator?
a. a total-blind study
b. a double-blind study
c. a single-blind study
d. a triple-blind study

ANS: B PTS: 1 DIF: conceptual REF: Expectancies and Biases in Experimental Research MSC: New

227. The main advantage of a double-blind research study is that it minimizes the effect of:
a. the dependent variable
b. the independent variable
c. expectations by both the experimenter and the participants
d. any confounding variables

ANS: C PTS: 1 DIF: medium REF: Expectancies and Biases in Experimental Research

228. A placebo can be used:
a. in either a single-blind or double-blind study
b. in either a total-blind or partial-blind study
c. only in a single-blind study
d. only in a total-blind study

ANS: A PTS: 1 DIF: conceptual REF: Expectancies and Biases in Experimental Research MSC: New

229. Dr. Brown designs an experiment to test the effects of a new memory drug. Half the participants will receive a placebo and half will receive the actual drug, but neither the participants nor the researchers administering the drug will be informed which is the placebo. Dr. Brown has designed:
a. an unethical experiment
b. a double-blind research study
c. a single-blind research study
d. a study that will maximize participant expectancy effects

ANS: B PTS: 1 DIF: applied REF: Expectancies and Biases in Experimental Research

230. Researchers use the term external validity to refer to:
a. effective control of potential confounding variables
b. how well research results generalize across subjects and situations
c. research results that are statistically significant
d. results obtained from research conducted in naturalistic settings

ANS: B PTS: 1 DIF: factual REF: Generalizing Experimental Conclusions

231. When research results generalize across subjects and situations, those results are considered to be:
a. internally valid
b. positively correlated
c. externally valid
d. statistically significant

ANS: C PTS: 1 DIF: factual REF: Generalizing Experimental Conclusions

232. The results of Dr. Ozawa's research study have been found to generalize easily to real-world situations. This means Dr. Ozawa's research is:
a. statistically significant
b. positively correlated
c. internally valid
d. externally valid

ANS: D PTS: 1 DIF: factual REF: Generalizing Experimental Conclusions MSC: New

233. The results of Dr. Cliff's research study do not generalize to real-world situations. This means Dr. Cliff's research is not:
a. statistically significant
b. externally valid
c. positively correlated
d. internally valid

ANS: B PTS: 1 DIF: factual REF: Generalizing Experimental Conclusions MSC: New

234. While Dr. Bartlett effectively controlled for confounding variables in his experiment, the results do not generalize to the real-world. This means Dr. Bartlett's research has:
a. neither internal validity nor external validity
b. low internal validity, but high external validity
c. high internal validity, but lacks external validity
d. high internal validity and high external validity

ANS: C PTS: 1 DIF: conceptual REF: Generalizing Experimental Conclusions MSC: New

235. While the results of Dr. Menger's experiment generalize to the real-world, but there were confounding variables in the study. This means Dr. Menger's research has:
a. neither internal validity nor external validity
b. high internal validity, but lacks external validity
c. low internal validity, but high external validity
d. high internal validity and high external validity

ANS: C PTS: 1 DIF: conceptual REF: Generalizing Experimental Conclusions MSC: New

236. Telling potential research participants the nature and possible risks of the research prior to their participation is part of the ethical requirement of:
a. informed consent
b. debriefing
c. confidentiality
d. compensation

ANS: A PTS: 1 DIF: applied REF: Informed Consent

237. The ethical practice that involves explaining, in easy-to-understand language, any significant factors that might influence a participant's willingness to participate in a research study is known as:
a. informed consent
b. debriefing
c. confidentiality
d. experimental control

ANS: A PTS: 1 DIF: factual REF: Informed Consent

238. Informed consent involves:
a. explaining any significant factors that might influence a participant's willingness to participate in a study
b. fully disclosing and explaining all aspects of a study, once the study is over
c. protecting the right to privacy of all the participants in a research study
d. asking participants to sign a waiver form at the beginning of a study

ANS: A PTS: 1 DIF: factual REF: Informed Consent

239. The ethical practice in which the purpose of a study is fully disclosed to the study's participants, once the study is over, is known as:
a. informed consent
b. debriefing
c. confidentiality
d. experimental control

ANS: B PTS: 1 DIF: factual REF: Debriefing and Confidentiality

240. Debriefing involves:
   a. explaining any significant factors that might influence a participant's willingness to participate in a study
   b. protecting the right to privacy of all the participants in a research study
   c. asking participants to sign a waiver form at the beginning of a study
   d. fully disclosing and explaining all aspects of a research study, once the study is over

   ANS: D PTS: 1 DIF: factual REF: Debriefing and Confidentiality

241. When the experiment ended, Raj told subjects the purpose of the experiment, what he hoped to learn, and who to contact for further information about the results. This was part of the ethical requirement of:
   a. humane treatment
   b. informed consent
   c. confidentiality
   d. debriefing

   ANS: D PTS: 1 DIF: applied REF: Debriefing and Confidentiality

242. Angelica took part in a research study where she had to sit alone in a darkened room for 30 minutes before completing a brief questionnaire about her future goals and plans. When she had completed the questionnaire, she was told the experiment was over. Angelica never really understood the purpose of the study, and she wasn't sure why she had to wait in the darkened room before filling out the short questionnaire. In this case, it would appear that the researchers who conducted the experiment:
   a. violated Angelica's right to confidentiality
   b. failed to obtain informed consent
   c. did not use an adequate debriefing procedure
   d. did not provide adequate protection from potential harm

   ANS: C PTS: 1 DIF: applied REF: Debriefing and Confidentiality

243. Keeping personal information about research participants private is part of the ethical requirement of:
   a. debriefing
   b. informed consent
   c. compensation
   d. confidentiality

   ANS: D PTS: 1 DIF: factual REF: Debriefing and Confidentiality

244. The ethical practice in which the right to privacy of all research participants is maintained is known as:
a. informed consent
b. debriefing
c. confidentiality
d. experimental control

ANS: C PTS: 1 DIF: factual REF: Debriefing and Confidentiality

245. Confidentiality involves:
a. explaining any significant factors that might influence a participant's willingness to participate in a study
b. fully disclosing and explaining all aspects of a study, once the study is over
c. protecting the right to privacy of all the participants in a research study
d. asking participants to sign a waiver form at the beginning of a study

ANS: C PTS: 1 DIF: factual REF: p. Debriefing and Confidentiality

246. Ezekial Zarnak III took part in a study on depression last year. He was somewhat distressed to read a recent article on depression in Newsweek where one of the patients was EZ3. Although the article claimed the names were disguised to protect personal identities, Ezekial is certain he is one of the people described in the article. In this case, it would appear that the researchers violated the ethical principle of:
a. confidentiality
b. informed consent
c. debriefing
d. full disclosure

ANS: A PTS: 1 DIF: applied REF: Debriefing and Confidentiality

247. One of the main reasons for using animals as subjects in a research study is that:
a. researchers are not bound by ethical restrictions in designing their studies
b. experimenters have better experimental control
c. animal research is much less expensive than comparable human research
d. it is not necessary to use a control group for comparison

ANS: B PTS: 1 DIF: factual REF: The Ethics of Animal Research

248. The percentage of current psychological research studies in which animals are used is:
a. about 90%
b. about 50%
c. about 25%
d. less than 10%

ANS: D PTS: 1 DIF: factual REF: The Ethics of Animal Research

TRUE/FALSE

1. The scientific method begins and ends with observation, and the same types of observations are collected in both the first and last steps.

   ANS: F PTS: 1 REF: Psychology for a Reason

2. Operational definitions define concepts in terms of the way in which the concepts will be measured.

   ANS: T PTS: 1 REF: Psychology for a Reason

3. When the results of a scientific observation are representative of real life, the results have internal validity.

   ANS: F PTS: 1 REF: Observing Behavior MSC: New

4. Case studies can provide researchers with an important historical perspective that can help them form hypotheses about the possible causes of a behavior or psychological problem.

   ANS: T PTS: 1 REF: Case Studies

5. Random sampling occurs when each person in a population has an equal chance of being selected to participate in a research study.

   ANS: T PTS: 1 REF: Surveys MSC: New

6. Researchers who use surveys can be confident that their results are accurate and reliable as long as they select a random sample that is large enough to accurately represent the population.

   ANS: F PTS: 1 REF: Surveys

7. A survey is an example of descriptive research.

   ANS: T PTS: 1 REF: Surveys MSC: New

8. The best way to measure a person's current level of knowledge or competence in a particular subject is to use an appropriate aptitude test.

   ANS: F PTS: 1 REF: Psychological Tests

9. The measure of central tendency that is affected the most by extreme scores in a set of data is the median.

   ANS: F PTS: 1 REF: Statistics

10. The range of a set of data is the sum of the largest and smallest scores.

    ANS: F PTS: 1 REF: Statistics MSC: New

11. Researchers use inferential statistics to decide whether the behaviors recorded in a sample are representative of some larger population.

    ANS: T PTS: 1 REF: Statistics

12. As Behavior X decreases, Behavior Y is expected to decrease. The correlation between the X and Y is positive.

    ANS: T PTS: 1 REF: Correlational Research MSC: New

13. The closer a correlation is to 1.00 (positive or negative), the more accurate predictions based on the correlation are likely to be.

    ANS: T PTS: 1 REF: Correlational Research

14. The presence of a strong correlation allows psychologists to make accurate predictions, but it does not allow them to determine causality.

    ANS: T PTS: 1 REF: Correlations and Causality

15. Any experimental manipulation must consist of at least two different conditions.

    ANS: T PTS: 1 REF: Explaining Behavior

16. In an experiment, a researcher manipulates the dependent variable in order to observe whether the behavior measured by the independent variable changes.

    ANS: F PTS: 1 REF: Independent and Dependent Variables

17. To accurately conclude that changes in the dependent variable are caused by variations in the independent variable, researchers need to ensure that the independent variable is the only thing that changes systematically in an experiment.

    ANS: T PTS: 1 REF: Experimental Control

18. A confounding variable is any factor in an experiment that has the same value in both the experimental and control groups.

    ANS: F PTS: 1 REF: Experimental Control

19. In random assignment, a researcher makes certain that each participant has an equal chance of being assigned to any of the groups or conditions in an experiment.

    ANS: T PTS: 1 REF: Experimental Control

20. According to the APA code of ethics, deception in research is only justified if the scientific, educational, or applied value of the study is clear, and there is no way to answer the research questions adequately without deceiving the participants.

    ANS: T PTS: 1 REF: Informed Consent

COMPLETION

1. A prediction about the characteristics of a behavior under investigation is called a(n): _____.

   ANS: hypothesis

   PTS: 1 REF: Psychology for a Reason MSC: New

2. In research, psychologists typically use _____, which define concepts specifically in terms of how those concepts can be measured.

   ANS: operational definitions

   PTS: 1 REF: Psychology for a Reason

3. Methods designed to observe and describe behavior are generally known as _____.

   ANS: descriptive research

   PTS: 1 REF: Observing Behavior MSC: New

4. An individual is exhibiting _____ when his or her behavior is changed by the process of being observed.

   ANS: reactivity

   PTS: 1 REF: Observing Behavior

5. The method involving recording naturally occurring behavior without any interference is known as _____.

   ANS: naturalistic observation

   PTS: 1 REF: Observing Behavior MSC: New

6. When an observer attempts to become a part of the activities being studied in order to blend into the group, the observer is performing _____.

   ANS: participant observation

   PTS: 1 REF: Observing Behavior MSC: New

7. In a(n) _____, a researcher focuses on a single individual.

   ANS: case study

   PTS: 1 REF: Case Studies

8. In research study, there is _____ if the results can be generalized to other situations.

   ANS: external validity

   PTS: 1 REF: Case Studies

9. Representative samples are achieved through _____, which means that everyone in the target population has an equal chance of being selected for the research.

   ANS: random sampling

   PTS: 1 REF: Surveys

10. A person would take a(n) _____ test to test his or her current level of knowledge or competence in a subject.

    ANS: achievement

    PTS: 1 REF: Psychological Tests

11. A person would take a(n) _____ test to measure his or her potential for success in a given profession.

    ANS: aptitude

    PTS: 1 REF: Psychological Tests

12. The arithmetic average or _____ is a commonly used measure of central tendency.

    ANS: mean

    PTS: 1 REF: Statistics

13. The most frequently occurring score or _____ is a commonly used measure of central tendency.

    ANS: mode

    PTS: 1 REF: Statistics

14. The score representing the middle of a data set or _____ is a commonly used measure of central tendency.

    ANS: median

    PTS: 1 REF: Statistics

15. Some measures of central tendency can be influenced by _____, which is how much the scores in a data set differ from one another.

    ANS: variability

    PTS: 1 REF: Statistics

16. A commonly used measure of variability is the _____, which measures the difference between the largest and smallest score in a data set.

    ANS: range

    PTS: 1 REF: Statistics

17. A commonly used measure of variability is the _____, which is the average difference scores in a data set are from the mean of the data set.

    ANS: standard deviation

    PTS: 1 REF: Statistics

18. Mathematical techniques such as the mean and standard deviation, that help researchers describe their data, are called _____.

    ANS: descriptive statistics

    PTS: 1 REF: Statistics MSC: New

19. Researchers use _____ to decide whether data collected in a sample are representative of some population.

    ANS: inferential statistics

    PTS: 1 REF: Statistics

20. When grades are determined according to the percentage of items a student answers correctly, _____ grading is being used.

    ANS: absolute

    PTS: 1 REF: Practical Solutions MSC: New

21. Grading on a curve is technically known as _____ grading.

    ANS: relative

    PTS: 1 REF: Practical Solutions MSC: New

22. The statistic that indicates whether two variables vary together is the _____.

ANS: correlation

PTS: 1 REF: Correlational Research MSC: New

23. Two variables have a(n) _____ correlation if the values of one variable increase as the values of the other variable also increase.

ANS: positive

PTS: 1 REF: Correlational Research

24. Two variables have a(n) _____ correlation if the values of one variable increase as the values of the other variable decrease.

ANS: negative

PTS: 1 REF: Correlational Research

25. When knowing the value of measure does not allow you to predict the value of a second measure with accuracy greater than chance, the two measures are _____.

ANS: uncorrelated

PTS: 1 REF: Correlational Research MSC: New

26. Researchers construct _____ to display negative and/or positive correlations.

ANS: scatterplots

PTS: 1 REF: Correlational Research

27. In _____ research, one actively manipulates some aspect of the testing environment to observe its effect on behavior.

ANS: experimental

PTS: 1 REF: Explaining Behavior

28. In an experiment, the _____ is manipulated by the investigator in order to determine whether it has an effect on behavior.

ANS: independent variable

PTS: 1 REF: Independent and Dependent Variables

29. In an experiment, the _____ is measured by the investigator in order to determine whether it has been affected by the manipulated variable.

ANS: dependent variable

PTS: 1 REF: Independent and Dependent Variables

30. An uncontrolled variable that changes systematically with the independent variable is a(n) _____ variable.

ANS: confounding

PTS: 1 REF: Independent and Dependent Variables MSC: New

31. In an experiment, there is _____ if a cause-effect relationship can be determined.

ANS: internal validity

PTS: 1 REF: Experimental Control

32. In an experiment, researchers use _____ in order to ensure that each participant has an equal chance of being assigned to any of the groups or conditions in the experiment.

ANS: random assignment

PTS: 1 REF: Experimental Control

33. In some experiments, participants receive a(n) _____, which is an inactive "sugar" pill that looks just like the drug used in the experimental condition.

ANS: placebo

PTS: 1 REF: Expectancies and Biases in Experimental Research

34. In some experiments, participants in the _____ group receive a placebo, which is an inactive "sugar" pill that looks just like the drug used in the experimental condition.

ANS: control

PTS: 1 REF: Expectancies and Biases in Experimental Research

35. Some experiments use a(n) _____ procedure in which participants are not informed about whether they are in the experimental or control group.

ANS: single-blind

PTS: 1 REF: Expectancies and Biases in Experimental Research

36. Some experiments use a(n) _____ procedure in which neither the participants nor the researchers are informed about which group (experimental or control) a participant is in.

ANS: double-blind

PTS: 1 REF: Expectancies and Biases in Experimental Research

37. Most research with people involves _____, which is a process by which the participant is told about what the research involves in easy-to-understand language.

ANS: informed consent

PTS: 1 REF: Informed Consent

38. After a research study, a participant may receive _____, which is intended to clear up any misunderstandings that the person might have about the research and to explain in detail why certain procedures were used.

ANS: debriefing

PTS: 1 REF: Debriefing and Confidentiality

39. After a research study, a researcher maintains _____, which means that he or she is not to discuss or report personal information obtained in the research.

ANS: confidentiality

PTS: 1 REF: Debriefing and Confidentiality

40. In psychology research, _____ are involved in less than 10 percent of studies.

ANS: animals

PTS: 1 REF: The Ethics of Animal Research

ESSAY

1. Outline the four steps in the scientific method using an appropriate example to illustrate each of the steps.

ANS:
Answer not provided.

PTS: 1 REF: Psychology for a Reason

2. Explain what is meant by naturalistic observation, and describe two unobtrusive observational procedures.

   ANS:
   Answer not provided.

   PTS: 1 REF: Naturalistic Observation

3. Describe the case study method of research, outlining the limitations of this method and discussing when this method might be the most appropriate.

   ANS:
   Answer not provided.

   PTS: 1 REF: Case Studies

4. Discuss the main concerns associated with survey research, focusing on the issue of sampling.

   ANS:
   Answer not provided.

   PTS: 1 REF: Surveys

5. What is random sampling? How does random sampling affect the composition of a sample that is obtained in a research study?

   ANS:
   Answer not provided.

   PTS: 1 REF: Surveys

6. What are achievement tests and aptitude tests? How do they differ?

   ANS:
   Answer not provided.

   PTS: 1 REF: Psychological Tests

7. Discuss the difference between descriptive and inferential statistics, and describe two main categories of descriptive statistics.

   ANS:
   Answer not provided.

   PTS: 1 REF: Statistics

8. Describe absolute grading and relative grading, and the problems associated with each.

   ANS:
   Answer not provided.

   PTS: 1 REF: Practical Solutions MSC: New

9. State the possible range of a correlation coefficient, and the nature of the relationship between variables at the low and high ends of the range. Why is this relationship important?

   ANS:
   Answer not provided.

   PTS: 1 REF: Correlational Research MSC: New

10. Explain the difference between a positive and a negative correlation using appropriate examples.

    ANS:
    Answer not provided.

    PTS: 1 REF: Correlational Research

11. Use an appropriate example to illustrate and explain why correlations cannot normally be used to determine the cause of behavior.

    ANS:
    Answer not provided.

    PTS: 1 REF: Correlations and Causality

12. When two variables are correlated, it is possible that there is a third variable involved. What is meant by the term *third variable?*

    ANS:
    Answer not provided.

    PTS: 1 REF: Correlations and Causality

13. Explain how experimental research differs from correlational research and identify the advantages that are associated with the experimental research method.

    ANS:
    Answer not provided.

    PTS: 1 REF: Explaining Behavior

14. Explain what the independent variable and the dependent variables are in an experimental study and use an appropriate example to illustrate each of these terms.

    ANS:
    Answer not provided.

    PTS: 1 REF: Independent and Dependent Variables

15. Explain the concept of internal validity. What is the relationship of internal validity to confounding variables?

    ANS:
    Answer not provided.

    PTS: 1 REF: Independent and Dependent Variables MSC: New

16. Explain what "random assignment" is, and what purpose it serves.

    ANS:
    Answer not provided.

    PTS: 1 REF: Independent and Dependent Variables MSC: New

17. Explain what is meant by a placebo and discuss how placebos can be used to reduce participant expectancies in single-blind studies.

    ANS:
    Answer not provided.

    PTS: 1 REF: Expectancies and Biases in Experimental Research

18. Explain what single-blind and double-blind studies involve, and what these procedures are meant to control for.

    ANS:
    Answer not provided.

    PTS: 1 REF: Expectancies and Biases in Experimental Research
    MSC: New

19. What is informed consent as it applies to psychological research involving human participants?

    ANS:
    Answer not provided.

    PTS: 1 REF: Informed Consent

20. Outline the ethical guidelines that apply to psychological research involving animals, and explain the role of animal research in understanding the mind and behavior.

ANS:
Answer not provided.

PTS: 1 REF: The Ethics of Animal Research