

# Chapter 2 A--The Research Enterprise in Psychology

Student: \_\_\_\_\_

1. The scientific approach assumes that
  - A. events are governed by some lawful order.
  - B. each event is completely unique.
  - C. there are no general laws or principles that apply to human behavior.
  - D. the search for absolute truth is the ultimate goal.
  
2. Answering the question of "how" something works is most closely associated with which goal of science?
  - A. the search for truth
  - B. application and control
  - C. measurement and description
  - D. understanding and prediction
  
3. Which is NOT among the goals of psychology?
  - A. the development of measurement techniques for describing behavior precisely and accurately
  - B. understanding why certain behaviors occur
  - C. applications of research findings to solve everyday problems
  - D. searching for absolute truths about behavior
  
4. Answering the question of "why" something happens is most closely associated with which goal of science?
  - A. the search for truth
  - B. application and control
  - C. measurement and description
  - D. understanding and prediction
  
5. IQ score, age, weight, grade point average, and income are all examples of
  - A. constants.
  - B. variables.
  - C. correlations.
  - D. statistics.

6. Any measurable conditions, events, characteristics, or behaviors that are controlled or observed in a study are called
- A. hypotheses.
  - B. correlations.
  - C. variables.
  - D. confounds.
7. The use of reinforcement principles to modify a child's unruly behavior reflects the goal of science that deals with
- A. understanding and prediction.
  - B. measurement and description.
  - C. deterministic and teleological.
  - D. application and control.
8. The scientific approach assumes that
- A. events will always remain unpredictable.
  - B. events are governed by some lawful order.
  - C. events occur in a random order.
  - D. events are the result of unseen causes.
9. The \_\_\_\_ approach assumes that events are governed by some lawful order.
- A. philosophical
  - B. mechanical
  - C. scientific
  - D. cognitive
10. Which of the following is NOT one of the three goals of science?
- A. application and control
  - B. measurement and description
  - C. construction and revision
  - D. understanding and prediction
11. The use of \_\_\_\_ allow scientists to objectively \_\_\_\_ behavior.
- A. application tools; understand
  - B. application tools; describe
  - C. measurement techniques; understand
  - D. measurement techniques; describe

12. When a scientist attempts to explain why "something happened," his work is MOST closely associated with which goal of science?
- A. application and control
  - B. construction and revision
  - C. measurement and description
  - D. understanding and prediction
13. If a psychologist hopes that his research will help to solve some practical problem, his hope reflects which goal of science?
- A. application and control
  - B. construction and revision
  - C. understanding and prediction
  - D. measurement and description
14. A tentative statement about the relationship between two or more variables is a(n)
- A. variable.
  - B. hypothesis.
  - C. theory.
  - D. operational definition.
15. Theories permit researchers to move from
- A. understanding to application.
  - B. concept to description.
  - C. application to control.
  - D. description to understanding.
16. A scientific theory has to be
- A. true.
  - B. accepted by others.
  - C. testable.
  - D. well established and not disputed.
17. Theory construction is
- A. a gradual iterative process that is always subject to revision.
  - B. a standard step-like process that quickly moves toward the truth.
  - C. a circular process that typically leads nowhere.
  - D. a process that results in concrete findings that are accepted by other scientists.

18. Dr. Marqueta believes that "misery loves company." Based on this belief, Dr. Marqueta predicts that people who have received bad news will seek out other people. Dr. Marqueta's belief is an example of \_\_\_\_\_, and her prediction is an example of \_\_\_\_\_.

- A. a hypothesis; a theory
- B. a theory; a hypothesis
- C. a variable; an application
- D. a hypothesis; a variable

19. A tentative statement about the relationship between two or more variables is a

- A. cause.
- B. theory.
- C. hypothesis.
- D. research method.

20. Mrs. Smith, an elementary school teacher, believes that girls are smarter than boys. She predicts that the girls in her class will learn more than the boys during the school year. Her prediction is a(n)

- A. hypothesis.
- B. opinion.
- C. fact.
- D. theory.

21. A theory is

- A. an objective description of behavior.
- B. a system of interrelated ideas used to explain a set of observations.
- C. the application of research to practical problems.
- D. a statement about the relationship between two or more variables.

22. Scientific theories are most directly associated with which goal of science?

- A. application and control
- B. construction and revision
- C. measurement and description
- D. understanding and prediction

23. A clinical psychologist notes that an unusually large number of obese people are depressed or anxious, and she offers an explanation that excess weight causes emotional disorders. Her explanation is a(n)

- A. hypothesis.
- B. theory.
- C. opinion.
- D. fact.

24. While theories are most closely associated with the scientific goal of \_\_\_\_\_, hypotheses are most closely associated with the goal of \_\_\_\_\_.

- A. application; description
- B. description; application
- C. understanding; prediction
- D. prediction; understanding

25. A hypothesis is

- A. a random guess as to what might happen in an experiment.
- B. a tentative statement about the relationship between two or more variables.
- C. a conclusion drawn from an experiment.
- D. a system of interrelated ideas used to explain a set of observations.

26. Hypotheses are typically expressed as

- A. theories.
- B. variables.
- C. predictions.
- D. statistics.

27. Dr. Licciardi predicts that if people are observed while they perform a complex task they will make more errors. Dr. Licciardi's prediction is an example of

- A. a hypothesis.
- B. an operational definition.
- C. a theory.
- D. inferential statistics.

28. Dr. Malm predicts that if teachers ignore students who act up in class, fewer students will act up in class. Dr. Malm's prediction is an example of

- A. an operational definition.
- B. a theory.
- C. inferential statistics.
- D. a hypothesis.

29. A researcher is measuring the heart rate of subjects as an index of anxiety. In this study, heart rate is

- A. a confounded variable.
- B. negatively correlated with anxiety.
- C. an independent variable.
- D. an operational definition of anxiety.

30. Dr. Dobbins wants to study attachment patterns in single-parent families. The first step in her scientific investigation would be to
- A. design the study and select the research method.
  - B. analyze the data.
  - C. formulate a testable hypothesis.
  - D. collect the data.
31. If you believe that increasing levels of anxiety are associated with drug abuse, you have just formulated
- A. an epiphenomenon.
  - B. a theory.
  - C. a correlation.
  - D. a hypothesis.
32. An operational definition
- A. describes the actions and procedures used to measure or control a variable.
  - B. separately defines each term used.
  - C. provides a logical basis for each term.
  - D. states relationships to other variables.
33. Dr. Critell is studying aggression in children and plans to define aggression as the number of times one child pushes or strikes another child. Defining aggression in this way would
- A. be an example of a hypothesis.
  - B. violate ethical guidelines for psychological research.
  - C. represent an operational definition.
  - D. require a double-blind research design.
34. A researcher is interested in examining whether relaxation techniques help decrease the perception of anxiety in subjects. The second step in this scientific investigation would be
- A. to design the study and select the research method.
  - B. to analyze the data.
  - C. to formulate a testable hypothesis.
  - D. to collect the data.
35. When subjects are administered a series of written questions designed to assess their attitudes, opinions, or behavior, this is called
- A. direct observation.
  - B. a questionnaire.
  - C. an interview.
  - D. a psychological test.

36. A psychologist monitors changes in the subject's heart rate as the subject watches a violent movie. The data collection technique being used is

- A. direct observation.
- B. psychological testing.
- C. physiological recording.
- D. archival records.

37. A standardized measure used to obtain a sample of a person's behavior is called

- A. a psychological test.
- B. a case study.
- C. an experiment.
- D. a survey.

38. Jackson is working with a company to help them develop more effective training programs for their employees. He has spent a great deal of time reviewing all the documentation the company has about previous training opportunities they have provided for their employees. Up to this point in time, Jackson has been engaged in

- A. psychological testing.
- B. archival research.
- C. direct observation.
- D. meta-analysis.

39. Two of the data collection techniques that are most likely to involve direct contact between the researcher and the research participant are

- A. direct observation and interviews.
- B. archival research and psychological testing.
- C. questionnaires and interviews.
- D. archival research and questionnaires.

40. Laura answered a series of written questions that asked about her attitudes and opinions on a number of current issues. The method of data collection that was being used in this case was

- A. a standardized psychological test.
- B. archival research.
- C. direct observation.
- D. a questionnaire.

41. The FINAL step in a scientific investigation is to

- A. conduct the study.
- B. analyze the data.
- C. decide whether or not the hypothesis was supported.
- D. report the findings.

42. A scientific journal refers to

- A. a personal diary kept by a scientist.
- B. a periodical that publishes technical and scholarly articles.
- C. a detailed record of the daily procedures followed in conducting a study.
- D. a collection of biographies of famous scientists.

43. Publication of research findings is extremely important to the scientific method because

- A. it allows for critique and self-correction.
- B. it brings recognition to the research worker.
- C. it forces the writer to be clear.
- D. the royalties help the researcher pay for the research.

44. The first step in a scientific investigation is

- A. to develop a theory.
- B. to formulate a testable hypothesis.
- C. to collect the data.
- D. to select the research method and design the study.

45. In scientific investigations a researcher must clearly define the variables under study by precisely describing how they will be measured or controlled. These definitions are referred to as

- A. objective definitions.
- B. precise definitions.
- C. operational definitions.
- D. dictionary definitions.

46. A psychologist measures blood alcohol level to determine intoxication. In this example, blood alcohol level is the \_\_\_\_ definition of intoxication.

- A. operational
- B. dictionary
- C. objective
- D. precise



47. A researcher decides exactly how his research project will be conducted when
- A. analyzing the data and drawing conclusions.
  - B. selecting a research method and designing the study.
  - C. formulating a testable hypothesis.
  - D. collecting the data.
48. Psychologists use a variety of data collection techniques; which of the following is well suited for studying attitudes?
- A. questionnaires
  - B. direct observations
  - C. psychological tests
  - D. physiological recordings
49. Statistical procedures are used during which step in conducting a scientific investigation?
- A. collect the data
  - B. select a research method and design the study
  - C. report the findings
  - D. analyze the data and draw conclusions
50. Most typically, researchers report their findings
- A. by holding a press conference.
  - B. in a book.
  - C. in a scientific magazine.
  - D. in a journal.
51. Which of the following is NOT true regarding common sense analyses of behavior?
- A. they tend to be vague and ambiguous
  - B. they often tolerate contradictory generalizations
  - C. they usually involve little effort to verify ideas or detect errors
  - D. they are typically based on precise definitions and hypotheses
52. Which of the following is NOT an advantage of the scientific approach?
- A. clarity
  - B. precision
  - C. acceptance of a degree of error
  - D. skepticism

53. The scientific approach requires that people specify exactly what they are talking about when they formulate hypotheses. Which advantage of scientific investigation does this illustrate?
- A. precision
  - B. acceptance of a degree of error
  - C. skepticism
  - D. operational definitions
54. The two main advantages of the scientific approach are science's
- A. commonsense approach and intolerance of error.
  - B. commonsense approach and easy acceptance of the research findings of others.
  - C. clarity and precision and intolerance of error.
  - D. clarity and precision and easy acceptance of the research findings of others.
55. Operational definitions are most closely associated with which major advantage of the scientific approach?
- A. commonsense approach
  - B. clarity and precision
  - C. intolerance of error
  - D. tolerance of error
56. The different general strategies for conducting scientific investigation are referred to as
- A. data collection techniques.
  - B. operational definitions.
  - C. research methods.
  - D. hypotheses.
57. The two main types of research methods used in psychology are the
- A. experimental and descriptive/correlational research methods
  - B. experimental and case study research methods
  - C. descriptive and correlational research methods
  - D. descriptive/correlational and case study research methods
58. The experiment is a research method in which the investigator
- A. systematically observes two variables to see whether there is an association between them.
  - B. observes behavior as it occurs in its natural environment.
  - C. conducts an in-depth investigation of an individual subject.
  - D. manipulates a variable under carefully controlled conditions and observes whether there are changes in a second variable as a result.

59. Manipulating a variable under carefully controlled conditions and observing the changes in a second variable defines

- A. the testing approach.
- B. the survey approach.
- C. the experimental approach.
- D. naturalistic observation.

60. A researcher wants to see if a protein-enriched diet will enhance the maze-running performance of rats. One group of rats is fed the high-protein diet for the duration of the study; the other group continues to receive ordinary rat chow. In this experiment, the rats' maze-running performance is the

- A. correlated variable.
- B. control variable.
- C. dependent variable.
- D. independent variable.

61. In an experiment, the variable that is controlled or manipulated by the researcher is called the

- A. dependent variable.
- B. independent variable.
- C. control variable.
- D. stimulus variable.

62. An independent variable in an experiment refers to

- A. the variable that is held constant across experimental conditions.
- B. the variable deliberately manipulated by the experimenter.
- C. the variable that the experimenter believes will change in value because of systematic correlations that exist in the experiment.
- D. the variable that provides an alternative explanation for the results of the experiment.

63. A group of researchers is investigating the effects of ginkgo biloba on memory. During the first part of the study the animals learn to run a maze while they are not receiving the supplement; in the second part of the study the animals learn to run a different maze while they are receiving the supplement. In each case the researchers count how many trials it takes before the animals can run the maze pattern without making any errors. In this study, the independent variable is

- A. the type of animal that the researchers select for the study.
- B. the presence or absence of the food supplement in the animal's diet.
- C. the number of trials it takes to run the maze without making any errors.
- D. the age of the animals in the study.

64. A group of researchers wanted to determine if people will eat more food in a room with red paint and red decorations than in a room that is decorated blue. Half the participants in this study ate in a red room and half ate in a blue room. The researchers then measured how much food was consumed in each of the two rooms. In this study, the independent variable was

- A. the type of food that was available during the study.
- B. the amount of food that was consumed.
- C. the color of the decorations in the room.
- D. how hungry the participants were at the end of the study.

65. Researchers who were studying plant growth raised plants in two separate rooms. One room had taped conversations playing 24 hours a day; the other room was silent. The researchers found that the plants grew better in the room which had the conversations playing. In this study, the type of room (conversation or silence) would be

- A. the dependent variable.
- B. an extraneous variable.
- C. a placebo.
- D. the independent variable.

66. Researchers who were studying memory had participants learn a list of words after consuming a soft drink with caffeine or a decaffeinated version of the same soft drink. The researchers then counted the number of words that were recalled from the list. In this study, the type of beverage (caffeinated or decaffeinated) would be

- A. the independent variable.
- B. an extraneous variable.
- C. the dependent variable.
- D. a placebo.

67. A dependent variable in an experiment refers to the variable

- A. held constant across the experimental conditions.
- B. deliberately manipulated by the experimenter.
- C. that changes value because of the systematic manipulation in the experiment.
- D. that the experimenter is depending on to cause something to happen in the experiment.

68. Researchers studying the effects of sleep deprivation tested the physical coordination skills of 25-year-old males who had been sleep deprived for either 24, 36, or 48 hours. In this study, the dependent variable would be

- A. the age of the research participants.
- B. the physical coordination skills of the men in the study.
- C. the length of time the participants had been sleep deprived.
- D. the type of physical coordination task the researchers use.

69. A group of researchers wants to determine if people are more likely to follow directions if the person giving the directions is in a uniform. Half the participants are directed to a parking spot by a uniformed security guard, the other half are directed to a parking spot by an individual wearing blue jeans and a t-shirt. In this study, the dependent variable would be

- A. the number of participants who park in the spot they are directed to.
- B. the type of clothing worn by the person giving the directions.
- C. the gender of the person driving into the parking lot.
- D. the distance between the parking spot and the entrance.

70. A group of researchers conducts a study to determine if children's performance is affected by the presence of other children. First, the children are taken to a room with no other children and timed while they complete a puzzle. Later, the same children are taken to a room with four other children and timed while they complete a similar puzzle. In this study, the length of time it takes to complete the puzzle would be

- A. the independent variable.
- B. an extraneous variable.
- C. a control variable.
- D. the dependent variable.

71. An industrial designer wants to determine if the new design for a piece of office equipment will result in fewer errors. The designer sets up a machine with the old design in one room, and a machine with the new design in a second room. He counts how many errors are made using each of the two machines. In this study, the number of errors that are made would be

- A. a control variable.
- B. the dependent variable.
- C. the independent variable.
- D. an extraneous variable.

72. If we view an experiment as an attempt to establish a cause-effect relationship, the \_\_\_\_ variable would be the cause, and the \_\_\_\_ variable would be the effect.

- A. dependent; independent
- B. independent; dependent
- C. control; experimental
- D. independent; confounded

73. A researcher found that clients who were randomly assigned to same-sex groups participated more in group therapy sessions than clients who were randomly assigned to coed groups. In this experiment, the dependent variable was

- A. the amount of participation in the group therapy sessions.
- B. whether or not the group was coed.
- C. the clients' attitudes toward group therapy.
- D. how much the clients' mental health improved.

74. The experimental group

- A. consists of the subjects who receive some special treatment with regard to the independent variable.
- B. consists of the subjects who receive some special treatment with regard to the dependent variable.
- C. consists of the subjects who do not receive the special treatment.
- D. must be chosen so as to be as different from the control group as possible.

75. In an experiment designed to test memory processes, one group was given special instructions and asked to group the items on a list into categories while they tried to memorize them. A second group of participants was given the same list, but they did not receive any special instructions. In this study, the experimental group is

- A. the group in which the participants remember the least items from the list.
- B. the group who did not receive any special instructions.
- C. the group who received the special instructions.
- D. the group in which the participants remember the most items from the list.

76. In a study designed to test the effects of a new drug developed to treat Alzheimer's disease, half the patients were given the actual drug while the other half of the patients were given a placebo (sugar pill). In this study, the experimental group is

- A. the patients who show evidence of an improvement in their memory.
- B. the group who received the actual drug.
- C. the group who received the placebo.
- D. the patients who were not included in the study.

77. David and Alexandra both take part in a research study that is investigating the effects of sleep deprivation on reaction time. David is kept awake for 24 hours straight, while Alexandra follows her normal sleep routine. In this study, David is part of the

- A. hypothesis group.
- B. experimental group.
- C. control group.
- D. dependent variable group.

78. The purpose of the control group is to

- A. make the experiment more complex.
- B. isolate the effect of the independent variable on the dependent variable.
- C. make statistical significance more likely.
- D. isolate the effect of the dependent variable on the independent variable.

79. A researcher wants to see if a protein-enriched diet will enhance the maze-running performance of rats. One group of rats is fed the high-protein diet for the duration of the study; the other group continues to receive ordinary rat chow. In this experiment, the group of rats that is fed the high-protein diet is \_\_\_\_ group; the group that receives ordinary rat chow is \_\_\_\_ group.

- A. a control; a control
- B. a control; an experimental
- C. an experimental; an experimental
- D. an experimental; a control

80. A researcher has children watch 30 minutes of violent television, and then counts the number of times they hit each other afterward in a one-hour play period as a measure of aggression. The researcher concludes that television violence causes aggression. However, this conclusion may be invalid because

- A. the study is strictly correlational.
- B. aggression wasn't operationally defined.
- C. there was no control group.
- D. it is unethical to force children to watch violent television.

81. A group of researchers wanted to determine whether children would behave more aggressively after watching violent television programming. Half the children in the study watched a violent television show; the other children watched a non-violent television program. In this study, the control group is the children who

- A. behave the most aggressively at the end of the study.
- B. watch the non-violent program.
- C. watch the violent show.
- D. behave the least aggressively at the end of the study.

82. Jason believes that patrons in his bar will be more likely to leave a tip if the tip jar already has some money in it, than if 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 Jason's experiment, the control group would be

- A. all the patrons who leave a tip when they leave the bar.
- B. the patrons who see a tip jar that contains at least \$5.00.
- C. the patrons who see an empty tip jar.
- D. all the patrons who leave the bar without tipping Jason.

83. Dr. Prutherow believes that people who are under stress will develop more colds than people who are not under stress. When he randomly selects 10 participants and exposes them to high levels of stress, he finds that 9 of the participants develop colds. Based on these results he concludes that stress causes an increase in colds. Dr. Prutherow's reasoning may be flawed because in this study

- A. there was no dependent variable in his study.
- 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.

84. By definition, an extraneous variable is

- A. a variable that affects the control group but not the experimental group.
- B. the same thing as a dependent variable.
- C. a variable that is completely irrelevant to both the independent and dependent variables.
- D. a variable, other than the independent variable, that may influence the dependent variable.

85. A variable, other than the independent variable, that appears to have influenced the dependent variable in a study is referred to as

- A. a covariate.
- B. an extraneous variable.
- C. a redundant variable.
- D. an inverse bias.

86. When two variables are linked and their individual effects cannot be separated out, we speak of the variables as being

- A. independent variables.
- B. dependent variables.
- C. confounded variables.
- D. codependent variables.

87. Diaz conducts a decision-making experiment to determine if people reason more logically when they have more time to decide. All the participants who are under 40 are allowed 15 minutes to reach a decision about a problem; all the participants who are over 40 are allowed 20 minutes to reach a decision about the same problem. Diaz has a problem with his experimental design because

- A. there are two control groups and no experimental group.
- B. the time allowed for the decision is confounded with the independent variable.
- C. there is no dependent variable in the experiment.
- D. the age of the participants is confounded with the independent variable.

88. In experiments, placing subjects in experimental groups such that each subject has an equal probability of ending up in any experimental group is referred to as

- A. random selection.
- B. random sampling.
- C. random forecasting.
- D. random assignment.



89. Random assignment of subjects occurs when

- A. subjects are allowed to choose which group or condition they would like to be in.
- B. a different method is used to assign each subject to a group or condition.
- C. all subjects have an equal chance of being assigned to any of the groups or conditions.
- D. all topics have an equal chance of being assigned to a particular experimenter.

90. Dr. Kalmagura plans on introducing a new exam review procedure in his chemistry classes. To check the effectiveness of the new procedure he is going to have half his students try the new technique for one semester, while the remaining students review in the way they have always done in the past. He asks each student to decide which of the techniques they would like to use, the new technique or the standard technique. In this example, Dr. Kalmagura's procedure illustrates

- A. the use of non-random assignment.
- B. a correlational research design.
- C. a double-blind research design.
- D. what is meant by informed consent in research.

91. Bill received a poor performance evaluation in his job last year. Since then Bill has started working through his lunch hour, he has taken on four special projects, and enrolled in night classes to upgrade his computer skills. If Bill receives a better evaluation at his next performance it will be hard for him to figure out why because

- A. he failed to use a double-blind procedure to test his hypothesis.
- B. he didn't formulate a research hypothesis before implementing the changes.
- C. none of the actions he took are likely to be related to his overall job performance.
- D. the three actions he took are confounded with each other.

92. Derrick designed an experiment in which participants listened to a persuasive speech delivered either by a person who was very tall or a person who was average in height. In addition, the speeches were delivered either by individuals wearing business clothes or by people wearing casual clothes. In this example, Derrick

- A. has two dependent variables, and will be able to determine if persuasion interacts with any other factors.
- B. has two independent variables, and will be able to determine if height and style of clothing interact.
- C. does not have a control group, which should reduce the impact of self-reporting bias in his study.
- D. is using a double-blind procedure, which should reduce experimenter bias.

93. The research method in which the investigator manipulates a variable under carefully controlled conditions and observes whether any changes occur in a second variable as a result is the

- A. scientific method.
- B. correlational method.
- C. descriptive method.
- D. experimental method.

94. The experimental method is a research method in which the investigator manipulates a variable under carefully controlled conditions and then
- A. observes whether any changes occur in a second variable as a result.
  - B. correlates the resulting behavior.
  - C. observes behavior in its natural environment.
  - D. surveys participants to learn their assessment of the variable.
95. In experimental research, the variable that is manipulated by the researcher so that its impact on another variable may be assessed is the
- A. extraneous variable.
  - B. dependent variable.
  - C. independent variable.
  - D. controlled variable.
96. In experimental research, the independent variable is the variable
- A. that is thought to be affected by the manipulated variable.
  - B. the researcher controls or manipulates.
  - C. that is considered an extraneous variable.
  - D. that is correlated with the second variable.
97. In experimental research, the variable that the researcher measures because it is thought to be affected by the manipulation of another variable is the
- A. extraneous variable.
  - B. dependent variable.
  - C. independent variable.
  - D. controlled variable.
98. In experimental research, the dependent variable is the variable
- A. that is thought to be affected by the manipulated variable.
  - B. the researcher controls or manipulates.
  - C. that is considered an extraneous variable.
  - D. that is correlated with the second variable.
99. In experimental research, the researcher manipulates the \_\_\_\_ variable in order to measure its effect on the \_\_\_\_ variable.
- A. dependent; independent
  - B. dependent; extraneous
  - C. independent; dependent
  - D. independent; extraneous

100. In experimental research, the data collected by the researcher are the

- A. primary variable.
- B. secondary variable.
- C. independent variable.
- D. dependent variable.

101. If a researcher varies the loudness of music in a factory to observe its effect on the rate of productivity of the employees, the independent variable is the

- A. factory setting.
- B. rate of productivity.
- C. style of music being played.
- D. loudness of the music being played.

102. If a researcher varies the loudness of music in a factory to observe its effect on the rate of productivity of the employees, the dependent variable is the

- A. factory setting.
- B. rate of productivity.
- C. style of music being used.
- D. loudness of music being used.

103. A researcher is investigating the effect of high room temperatures on aggressive behavior in preschoolers. Half of the children are in a classroom where the temperature is a warm 88 degrees and half are in a classroom where the temperature is a normal 77 degrees. The researcher measures the number of hitting incidents that occur in each classroom. In this study the temperature of the room is the

- A. dependent variable.
- B. experimental group.
- C. control group.
- D. independent variable.

104. A researcher is investigating the effect of warm room temperature on aggressive behavior in preschoolers. Half of the children are in a classroom where the temperature is a warm 88 degrees and half are in a classroom where the temperature is a normal 77 degrees. The researcher measures the number of hitting incidents that occur in each classroom. In this study the number of hitting incidents is the

- A. dependent variable.
- B. experimental group.
- C. independent variable.
- D. control group.

105. In experimental research, subjects in the experimental group

- A. receive the dependent variable.
- B. do not receive the dependent variable.
- C. receive some special treatment in regard to the independent variable.
- D. do not receive some special treatment in regard to the independent variable.

106. In experimental research, subjects that receive some special treatment in regard to the independent variable are the

- A. experimental group.
- B. control group.
- C. observational group.
- D. correlational group.

107. In experimental research, subjects that do NOT receive some special treatment in regard to the independent variable are the

- A. experimental group.
- B. control group.
- C. observational group.
- D. correlational group.

108. In experimental research, while subjects in the \_\_\_\_ group received some special treatment in regard to the independent variable, subjects in the \_\_\_\_ group did not.

- A. control; experimental
- B. experimental; control
- C. primary; secondary
- D. secondary; primary

109. Subjects in the control group should be \_\_\_\_ subjects in the experimental groups in all respects except for the treatment they receive in regards to the \_\_\_\_.

- A. very different from; independent variable
- B. very different from; dependent variable
- C. very similar to; independent variable
- D. very similar to; dependent variable

110. A researcher is investigating the effect of high room temperature on aggressive behavior in preschoolers. Half of the children are in a classroom where the temperature is a warm 88 degrees and half are in a classroom where the temperature is a normal 77 degrees. The researcher measures the number of hitting incidents that occur in each classroom. In this study the children in the warm classroom are the

- A. primary group.
- B. secondary group.
- C. experimental group.
- D. control group.

111. A researcher is investigating the effect of high room temperature on aggressive behavior in preschoolers. Half of the children are in a classroom where the temperature is a warm 88 degrees and half are in a classroom where the temperature is a normal 77 degrees. The researcher measures the number of hitting incidents that occur in each classroom. In this study the children in the normal temperature classroom are the

- A. primary group.
- B. secondary group.
- C. experimental group.
- D. control group.

112. A researcher is investigating the effect of music on the productivity of employees in a factory. Half of the employees listen to music while working and half do not listen to music. The researcher measures the productivity of each employee. In this study the employees who listen to music are the

- A. independent group.
- B. dependent group.
- C. control group.
- D. experimental group.

113. A researcher is investigating the effect of music on the productivity of employees in a factory. Half of the employees listen to music while working and half do not listen to music. The researcher measures the productivity of each employee. In this study the employees who do not listen to music are the

- A. independent group.
- B. dependent group.
- C. control group.
- D. experimental group.

114. Variables, other than the independent variable, that seem likely to influence the behavior of subjects in a study are called

- A. control variables.
- B. dependent variables.
- C. extraneous variables.
- D. random variables.

115. A researcher tries to make sure that subjects in the experimental and control groups are very similar to each other in order to reduce the effects of
- A. extraneous variables.
  - B. random variables.
  - C. dependent variables.
  - D. independent variables.
116. Which of the following is NOT a variation that the experimental method can use?
- A. use one group of subjects who serve as both the experimental group and as their own control
  - B. use an experimental group only and have no control group
  - C. manipulate more than one independent variable
  - D. measure more than one dependent variable
117. In the Featured Study on how expectations influence reaction to positive and negative outcomes, one of the independent variables was
- A. the group that the subject was assigned to (experimental or control).
  - B. the actual measurement of the students emotions.
  - C. the bogus medical test.
  - D. the subject's expectations about whether the gene deficiency was common or uncommon among college students.
118. In the Featured Study on how expectations influence reaction to positive and negative outcomes, the dependent variable was
- A. the envelope containing the results of the test.
  - B. the actual measurement of the students emotions.
  - C. the bogus medical test.
  - D. the subject's expectations about whether the gene deficiency was common or uncommon among college students.
119. Your chemistry professor tells the class that his exams are extremely challenging and that most students tend to perform poorly on them while your math professor tells the class that his exams are extremely easy. Upon receiving your exam grades you score very highly on both exams. Based on the results of the Featured Study on how expectations influence emotional reactions to positive and negative outcomes what type of emotional reaction are you likely to show?
- A. You will feel more highly positive about your chemistry grade than your math grade.
  - B. You will feel more highly positive about your math grade than your chemistry grade.
  - C. You will be equally pleased about the outcome of both exams.
  - D. You will be upset that you did not get 100 on both exams.

120. Your chemistry professor tells the class that his exams are extremely challenging and that most students tend to perform poorly on them while your math professor tells the class that his exams are extremely easy. Upon receiving your exam grades you score very poorly on both exams. Based on the results of the Featured Study on how expectations influence emotional reactions to positive and negative outcomes what type of emotional reaction are you likely to show?

- A. You will feel more negative about your chemistry grade than your math grade.
- B. You will feel more negative about your math grade than your chemistry grade.
- C. You will be equally pleased about the outcome of both exams.
- D. You will feel more positive about your chemistry grade and more negative about your math grade.

121. In the Featured Study on "The Emotional Fallout of Expected and Unexpected Outcomes" participants' expectations were manipulated by

- A. asking them if they thought they would receive either an "A" or a "C" in a course.
- B. telling them they received either an "A" or a "C" in a course.
- C. telling them an enzyme deficiency was either very uncommon or very prevalent among college students.
- D. telling them they either had or did not have an enzyme deficiency.

122. In the Featured Study on "The Emotional Fallout of Expected and Unexpected Outcomes" the participants that had the lowest mean emotion rating were the participants who

- A. expected good news and received good news.
- B. expected bad news and received bad news.
- C. expected good news and received bad news.
- D. expected bad news and received good news.

123. The Featured Study on "The Emotional Fallout of Expected and Unexpected Outcomes" BEST relates to the text's unifying theme

- A. psychology is theoretically diverse.
- B. people's experience of the world is highly subjective.
- C. behavior is shaped by cultural heritage.
- D. psychology is empirical.

124. Conclusions concerning cause and effect relationships are only possible when the \_\_\_\_\_ method is used.

- A. survey
- B. experimental
- C. correlational
- D. descriptive

125. The main advantage associated with the experimental method is

- A. its precise control.
- B. its ability to duplicate real life in the laboratory.
- C. that it can be used to explore just about everything.
- D. participants usually enjoy taking part in the study.

126. The ability to infer a cause-and-effect relationship is associated only with the

- A. correlational research method.
- B. case history research method.
- C. experimental research method.
- D. empirical research method.

127. One of the disadvantages of the experimental method is

- A. the inability to generate cause-and-effect conclusions.
- B. the length of time necessary to complete the study.
- C. the fact that only one variable can be studied at a time.
- D. the fact that experiments often can't be done for practical or ethical reasons.

128. Which of the following is NOT a disadvantage of the experimental method of conducting research?

- A. It cannot be used to study certain issues.
- B. It produces artificial situations that may not be applicable to real life.
- C. It is impossible to manipulate certain variables.
- D. It is virtually impossible to conduct a true experiment with human beings.

129. One of the disadvantages of the experimental method is

- A. the inability to generate cause-and-effect conclusions.
- B. the artificial, contrived situations in which experiments are often conducted.
- C. the length of time necessary to complete the study.
- D. the fact that only one variable can be studied at a time.

130. Compared to the other scientific research methods, the principal advantage of the experimental method is it

- A. can easily be used to study all research questions.
- B. allows for a description of behavior.
- C. permits conclusions about cause and effect relationships.
- D. observes behavior in its natural setting.



131. A disadvantage or limitation of the experimental research method is

- A. the researcher has little control over the situation.
- B. it does not allow for conclusions concerning cause and effect relationships.
- C. it does not allow for a description of behavior.
- D. it frequently takes place under artificial circumstances.

132. A disadvantage or limitation of the experimental research method is

- A. because of practical or ethical reasons it cannot be used to study some research questions.
- B. it does not allow for conclusions concerning cause and effect relationships.
- C. it does not allow for a description of behavior.
- D. the researcher has little control over the situation.

133. In descriptive/correlational research, the investigator

- A. systematically observes two variables to see whether there is an association between them.
- B. manipulates a variable under carefully controlled conditions and observes whether there are changes in a second variable as a result.
- C. exposes subjects to two closely related treatment conditions.
- D. simultaneously manipulates two or more independent variables.

134. Which of the following is NOT listed in the textbook as a descriptive research method?

- A. criterion-based induction
- B. case studies
- C. surveys
- D. naturalistic observation

135. Naturalistic observation, case studies, and surveys all have in common that

- A. they do not directly observe behavior.
- B. they do not manipulate the variables under study.
- C. they can show causal relationships.
- D. the results obtained cannot be analyzed statistically.

136. Which research method involves a researcher engaging in careful observation of behavior without intervening directly with the subjects?

- A. criterion-based induction
- B. case studies
- C. surveys
- D. naturalistic observation

137. Going to a playground for an hour each day for two weeks and recording girl-boy exchanges would be an example of

- A. a case study.
- B. a survey.
- C. naturalistic observation.
- D. an experiment.

138. Recording all instances of an event for a particular time period (such as how many times an older brother strikes his younger brother) without the subjects' awareness is an example of

- A. compiling a case study.
- B. correlational research.
- C. conducting an experiment.
- D. naturalistic observation.

139. You are sitting on a park bench in a major metropolitan area from 7 a.m. to 7 p.m. and you note the number of people who walk by, whether or not they litter, and their gender. You are engaging in

- A. casual observation.
- B. naturalistic observation.
- C. case study research.
- D. experimental research.

140. In compiling case studies clinicians and researchers often focus on information that is consistent with their own theoretical slant. As a result, case studies tend to

- A. be the most accurate records available for the majority of psychological disorders.
- B. lack enough detail to provide any useful insights to other psychologists.
- C. be highly subjective.
- D. have too many dependent variables.

141. 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. hypotheses cannot be generated about the origin of the behavior.
- C. they cannot be used to study rare or unusual events.
- D. the experiences reported may not be representative of other cases.

142. A group of researchers wanted to investigate allegations of sexual harassment on a company's assembly line. To make their observations, the researchers took jobs working on the assembly line and pretended to be new employees. In this example, the researchers were using

- A. naturalistic observation.
- B. correlational research.
- C. survey research.
- D. the case study method of research.

143. A local hospital wanted to assess the way its patients were being treated. The hospital hired several researchers to act as patients and record the way hospital personnel handled the admitting and preliminary evaluation procedures. In this example, the researchers hired by the hospital were engaged in

- A. case study research.
- B. naturalistic observation.
- C. correlational research.
- D. survey research.

144. The tendency for participants to participate in survey research appears to have

- A. increased noticeably in recent decades.
- B. increased for mail surveys but decreased for phone surveys.
- C. remained relatively constant since the early 1950s.
- D. declined noticeably in recent decades.

145. Jolyn believed that there were gender differences in driving habits. To test this assumption she stood near a quiet intersection. Jolyn recorded the gender of each driver who approached a stop sign, and also whether the individual came to a complete stop before proceeding into the intersection. Jolyn is conducting

- A. an experiment with two dependent variables.
- B. case study research.
- C. naturalistic observation.
- D. psychological testing.

146. One advantage of naturalistic observation is that it

- A. approximates the experimental method.
- B. allows for cause-and-effect conclusions to be drawn.
- C. allows behavior to be studied in realistic settings.
- D. involves random assignment.

147. Which research method involves an in-depth investigation of an individual subject?

- A. an experiment
- B. a case study
- C. a survey
- D. a naturalistic observation

148. Dr. Kincaid was interested in the topic of autistic savants (individuals with limited abilities in many areas, but with an exceptional talent in one specific area). In the initial part of the investigation Dr. Kincaid carefully observed and compiled detailed files on three individuals who were autistic savants. Dr. Kincaid is conducting

- A. case study research.
- B. survey research.
- C. correlational research.
- D. experimental research.

149. Which of the following techniques is most likely to prove useful in determining why one particular child is afraid to go to school?

- A. experiment
- B. descriptive study
- C. naturalistic observation
- D. case study

150. If you interviewed a person over a period of time to understand that person to the greatest degree possible, you would be using the

- A. experimental method of research.
- B. correlational method of research.
- C. case study method of research.
- D. independent variable method of research.

151. NASA wanted to know if extended periods of weightlessness would have an impact on long-term circulatory function. The agency located seven former astronauts who had spent more than one month in space under conditions of weightlessness, and tested all aspects of their cardiovascular function. NASA's research with these seven astronauts would be considered to be

- A. survey research.
- B. experimental research.
- C. correlational research.
- D. case study research.

152. Which research method involves the use of questionnaires or interviews to gather information about specific aspects of participant's background and behavior?

- A. an experiment
- B. a case study
- C. a survey
- D. a naturalistic observation

153. One of your friends is writing a research paper and wants to obtain information about the depth of personal information people typically reveal during a first date. Directly observing a large number of people during a first date will be difficult, so your friend asks for your advice on the best way to collect this type of data. The best suggestion would be for your friend to use

- A. the case study approach.
- B. archival research.
- C. a double-blind observational study.
- D. a survey.

154. Estavan received a questionnaire in the mail asking about his general buying habits. He was asked to identify the specific products that he typically buys, and the amount of each product that he typically uses. If Estavan completes the questionnaire and returns it, he will have taken part in research that incorporates

- A. the survey method.
- B. naturalistic observation.
- C. a case study approach.
- D. archival research.

155. When studying a research question where it would be impractical to manipulate the variables of interest, a researcher would use a(n)

- A. logical method.
- B. common sense method.
- C. experimental method.
- D. descriptive/correlational method.

156. Descriptive/correlational research methods allow researchers to

- A. manipulate several variables at the same time.
- B. examine whether there is a link or association between variables being studied.
- C. draw conclusions concerning cause and effect relationships.
- D. exert precise control over the variables being studied.

157. Which of the following is NOT a descriptive/correlational research method?

- A. survey
- B. experiment
- C. case study
- D. naturalistic observation

158. Naturalistic observations, case studies, and surveys all have in common that

- A. they take place in an artificial setting.
- B. they involve manipulating the variables of interest in the study.
- C. they involve describing behavior.
- D. they show cause and effect relationships.

159. The research method in which a researcher engages in careful observation of behavior without intervening directly with the subjects is the

- A. case study method.
- B. correlation method.
- C. survey method.
- D. naturalistic observation method.

160. In the naturalistic observation method the researcher

- A. uses questionnaires or interviews to gather information about specific aspects of participants' behavior.
- B. engages in careful observation of behavior without intervening directly with subjects.
- C. manipulates a variable under carefully controlled conditions.
- D. conducts an in-depth investigation of an individual subject.

161. If a researcher studied helping behavior by observing how often shoppers stopped to help an individual pickup dropped packages they would be using the

- A. survey method.
- B. case study method.
- C. naturalistic observation method.
- D. experimental method.

162. The research method in which a researcher conducts an in-depth investigation of an individual subject is the

- A. case study method.
- B. correlational method.
- C. survey method.
- D. naturalistic observation method.

163. In the case study method the researcher

- A. uses questionnaires or interviews to gather information about specific aspects of participants' behavior.
- B. engages in careful observation of behavior without intervening directly with subjects.
- C. manipulates a variable under carefully controlled conditions.
- D. conducts an in-depth investigation of an individual subject.

164. If a researcher is interested in an in-depth study concerning the long-term consequences that physical disabilities have on psychological adjustment, the researcher would be MOST likely to use the

- A. survey method.
- B. naturalistic observation method.
- C. experimental method.
- D. case study method.

165. A number of techniques such as interviews, direct observations, and psychological testing may be used when a researcher is conducting

- A. a survey.
- B. a case study.
- C. naturalistic observation.
- D. a correlation.

166. The research method in which a researcher uses questionnaires or interviews to gather information about specific aspects of participants' behavior is the

- A. case study method.
- B. correlation method.
- C. survey method.
- D. naturalistic observation method.

167. In the survey method the researcher

- A. uses questionnaires or interviews to gather information about specific aspects of participants' behavior.
- B. engages in careful observation of behavior without intervening directly with subjects.
- C. manipulates a variable under carefully controlled conditions.
- D. conducts an in-depth investigation of an individual subject.

168. The research method that is often used to obtain information concerning individuals' behaviors, attitudes, and/or opinions is the

- A. case study method.
- B. naturalistic observation method.
- C. correlation method.
- D. survey method.

169. If a researcher is interested in studying individuals' attitudes toward "animal rights issues" they would MOST likely conduct

- A. a case study.
- B. a survey.
- C. a correlation.
- D. a naturalistic observation.

170. Broadening the scope of phenomena that psychologists are able to study is associated with

- A. descriptive research methods.
- B. introspective research methods.
- C. hypothetical deductive research methods.
- D. functional research methods.

171. Perhaps the greatest advantage associated with descriptive research methods is

- A. a sensitivity to ethical concerns.
- B. the isolation of cause and effect linkages in behavior.
- C. the ability to focus on specific, isolated behaviors.
- D. the ability to explore questions that cannot be examined using experimental procedures.

172. Perhaps the greatest disadvantage or limitation associated with descriptive research methods is

- A. the inability to look at important variables like nutritional effects on behavior.
- B. an insensitivity to ethical concerns.
- C. the inability to control events and isolate cause and effect linkages.
- D. the fact that these methods usually focus attention too narrowly on a single variable.

173. Trevor plans to study the relationship between people's responses to highly stressful situations and their overall health. He decides he must use correlational research, rather than experimental research, to investigate this problem. Trevor most likely chose a correlational method because correlational studies

- A. tend to be more accurate than experiments.
- B. have higher internal validity than experiments when there are two dependent variables.
- C. can be used to study either positive or negative relationships, whereas experiments can only be used to study positive relationships.
- D. can be used to investigate factors that would be unethical to manipulate in an experimental study.



174. The principal advantage of descriptive/correlational research methods is they

- A. often observe behavior in artificial situations.
- B. permit conclusions concerning cause and effect relationships.
- C. can examine research questions that because of practical and ethical reasons cannot be studied with other methods.
- D. allow the researcher a high level of control over the variables of interest.

175. A researcher plans to study the relationship between people's smoking behavior and their tendency to have minor physical illnesses (such as colds or the flu). Most likely he will use correlational research for the study because

- A. correlational studies are always the "first choice" of researchers.
- B. it is not practical or ethical to manipulate people's smoking behavior.
- C. correlational studies allow the researcher to draw strong cause and effect conclusions.
- D. the university does not allow smoking in the psychology building.

176. The principal disadvantage of the descriptive/correlational research method is

- A. because of practical or ethical reasons they cannot be used to study some research questions.
- B. since researchers cannot control variables of interest, conclusions concerning cause and effect relationships are not appropriate.
- C. they do not allow the researcher to describe behavior.
- D. they frequently observe behavior in artificial situations.

177. The primary reason descriptive/correlational research cannot determine conclusively that variables have a cause and effect relationship is because in conducting the research

- A. the researcher cannot control events or manipulate variables.
- B. only an experimental group is used.
- C. the data collected frequently comes from direct observations or statements made by subjects.
- D. the researcher observes behavior under artificial situations.

178. The use of mathematics to organize, summarize, and interpret numerical information is referred to as

- A. calculus.
- B. functional analysis.
- C. statistics.
- D. algebra.

179. Statistics can be used to do all of the below EXCEPT

- A. summarize observations.
- B. organize observations.
- C. interpret observations.
- D. prove observations.

180. The two basic types of statistics are

- A. descriptive and inferential.
- B. central tendency and variability.
- C. sampling and correlative.
- D. parametric and nonparametric.

181. Statistics that are used to summarize and organize data are called

- A. descriptive statistics.
- B. numerical statistics.
- C. inferential statistics.
- D. computational statistics.

182. The score that falls exactly in the center of a distribution of scores, such that half the scores fall below that score and half the scores fall above it, is the

- A. mean.
- B. standard deviation.
- C. range.
- D. median.

183. The median is

- A. the score that falls exactly in the center of a distribution.
- B. the arithmetic average of the scores in a distribution.
- C. the score that occurs most frequently in a distribution.
- D. the difference between the largest and the smallest scores in a distribution.

184. Your grade point average is an example of which measure of central tendency?

- A. median
- B. mean
- C. mode
- D. midpoint

185. The mode in a group of scores describes the \_\_\_\_ for that group of scores.

- A. central tendency
- B. association with another group of scores
- C. halfway point
- D. variability

186. Charley tells you that 17 out of the 30 students enrolled in his English class scored exactly 62 points on the last exam. Conceptually, this is the same as saying

- A. the mean for that particular English exam was 62 points.
- B. the median for that particular English exam was 62 points.
- C. the standard deviation for that particular English exam was 62 points.
- D. the mode for that particular English exam was 62 points.

187. When the scores for a recent Chemistry exam were calculated, the mean was 60 and the median was 65. Later the professor discovered that one score had been recorded incorrectly; it had been entered into the computer as a 5, instead of as a 50. When this correction is made,

- A. the median for the exam will change, but the mean will stay the same.
- B. both the mean and the median for the exam will change.
- C. the mean for the exam will change, but the median will stay the same.
- D. neither the mean nor the median for the exam will be affected.

188. Carla earned 78 points on her statistics exam. Ten of the students in her class earned higher scores than she did, and ten students earned lower scores than she did. Based on this information, you can conclude that Carla's score of 78 points is

- A. the standardized score for her class.
- B. the median for her class.
- C. the mean for her class.
- D. the mode for her class.

189. In Margaritte's sociology discussion group 4 of the 5 students are between the ages of 19 and 23; the fifth student is 54 years old. If Margaritte wants to report the statistic that best represents the "average" age for her discussion group, she should report either

- A. the mean or the median, because these numbers are typically the same.
- B. the mean or the mode, because these number are not affected by extreme scores.
- C. the median or the mode, because these numbers will be more representative.
- D. the mean or the standard deviation, so additional statistics can be calculated.

190. The standard deviation is a measure of

- A. central tendency.
- B. the degree of relationship between two variables.
- C. the amount of variability in a data set.
- D. the difference between the largest and smallest scores in a data set.

191. When variability in a data set is large, the standard deviation will be \_\_\_\_; when variability is small, the standard deviation will be \_\_\_\_.

- A. large; small
- B. large; large
- C. small; large
- D. small; small

192. Georgeanne calculated descriptive statistics for the age of residents in a nursing home. She reported the mean age as 75 years, with a standard deviation of 10 years. Later she found that she had made an error in her calculations. One resident's age was entered as 27 when it should have been 72. When this correction is made

- A. the standard deviation for the data set will decrease.
- B. the standard deviation for the data set will not change.
- C. the standard deviation for the data set will increase.
- D. the correlation coefficient for the data set will become negative.

193. Carmella is in a class where the scores on the second midterm exam ranged from 75 to 85 points. Conrad is taking the same course, but in his section the scores ranged from 50 to 98 points. In this example the standard deviation in Carmella's class should be

- A. negatively correlated with the standard deviation in Conrad's class.
- B. lower than the standard deviation in Conrad's class.
- C. higher than the standard deviation in Conrad's class.
- D. the same as the standard deviation in Conrad's class.

194. Descriptive statistics

- A. are numerical indexes of the degree of relationship between two variables.
- B. are used to organize and summarize data.
- C. are used to interpret data and draw conclusions.
- D. indicate the probability that the observed findings are due to chance.

195. Which of the following is NOT a measure of central tendency?

- A. mode
- B. mean
- C. median
- D. variability

196. The most frequent score in a distribution is the

- A. standard deviation.
- B. mean.
- C. median.
- D. mode.

197. The median of the following distribution of scores 1, 2, 3, 7, 7 is

- A. 3.
- B. 4.
- C. 5.
- D. 7.

198. The measure of central tendency that is MOST sensitive to (or most influenced by) extreme scores in a distribution is the

- A. standard deviation.
- B. mean.
- C. median.
- D. mode.

199. How much the scores in a data set vary from each other and from the mean refers to the concept of

- A. correlation.
- B. central tendency.
- C. variability.
- D. standard deviation.

200. The \_\_\_\_ is an index of the amount of variability in a set of data.

- A. statistical significance
- B. central tendency
- C. standard deviation
- D. correlation coefficient

201. The correlation coefficient is a measure of

- A. central tendency.
- B. the amount of variability in a data set.
- C. the degree of relationship between two variables.
- D. the difference between the largest and smallest scores in a data set.

202. If we were to measure the height and weight of 100 adult women, we would find that these two measures are

- A. uncorrelated.
- B. increasingly correlated.
- C. negatively correlated.
- D. positively correlated.

203. Suppose a researcher discovered a  $+0.87$  correlation between the length of a person's toes and the number of shoes the person owns. In general, people who own the fewest number of shoes would have

- A. small toes.
- B. large toes.
- C. medium-sized toes.
- D. either very large or very small toes.

204. Based on the information on getting more out of lectures presented in the personal application section in chapter 1, absences from classes and grade average in the class would be

- A. uncorrelated.
- B. increasingly correlated.
- C. negatively correlated.
- D. positively correlated.

205. Dr. Macator predicts that people will act more aggressively during the heat waves of summer than they will during the cold spells of winter. This suggests that Dr. Macator believes that temperature and level of aggression are

- A. negatively correlated.
- B. independent variables.
- C. uncorrelated.
- D. positively correlated.

206. As interest rates increase, house sales decline, indicating

- A. a direct correlation between the two variables.
- B. a negative correlation between the two variables.
- C. a positive correlation between the two variables.
- D. no correlation between the two variables.

207. The FDA found that people who used a particular diet drug combination had more heart valve defects than people who had not taken the diet drug combination. This suggests that the use of the diet drug combination and heart valve defects are

- A. negatively correlated.
- B. independent variables.
- C. positively correlated.
- D. interactive variables.

208. Imagine that the personality traits of openness and extroversion are positively correlated. If Andrea's score in openness is extremely low,

- A. she would most likely score at the low end of the extroversion scale.
- B. it is impossible to predict how she is likely to score on the extroversion scale without more information.
- C. she would most likely score at the high end of the extroversion scale.
- D. she would probably score close to the median on the extroversion scale.

209. Dr. Barton has found that students who score higher than 85% on the first midterm tend to earn scores of 75% or better on the final exam, while students who score less than 60% on the first midterm often end up with a failing grade on the final exam. This suggests that

- A. the scores on the first midterm and the final exam are positively correlated.
- B. the scores on the first midterm and the final exam are negatively correlated.
- C. students who do poorly on the first midterm give up and study less for the final.
- D. Dr. Barton should change the final so it is more fair to students who are not doing well in the course.

210. Suppose a researcher discovered a strong negative correlation between the length of people's hair and the amount of money they paid for their automobile. In general, people who paid the least amount of money for their automobile also had

- A. the longest hair.
- B. mid-length hair.
- C. the shortest hair.
- D. either extremely long or extremely short hair.

211. Suppose that students who work more hours at their jobs tend to have lower grade point averages, and also tend to get less sleep. If we were to correlate the two variables of grade point average and number of hours of sleep, we would find that the correlation coefficient is

- A. greater than one.
- B. equal to zero.
- C. less than zero.
- D. greater than zero, but less than one.

212. Mice who received ginkgo biloba in their diets made fewer errors in a maze running task than mice who had not received ginkgo biloba. This suggests that, in mice, the use of ginkgo biloba and errors in maze running are

- A. dependent variables.
- B. negatively correlated.
- C. positively correlated.
- D. uncorrelated.

213. As the number of bystanders' increases, people are less likely to help someone who is in distress. This suggests that the size of a crowd and helping behavior are

- A. negatively correlated.
- B. uncorrelated.
- C. positively correlated.
- D. dependent variables.

214. Imagine that the personality traits of conscientiousness and extroversion are negatively correlated. If Wilfred's score in conscientiousness is extremely low

- A. he would probably score close to the median on the extroversion scale.
- B. he would most likely score at the high end of the extroversion scale.
- C. he would most likely score at the low end of the extroversion scale.
- D. it is impossible to predict how he is likely to score on the extroversion scale without more information.

215. Dr. Hackle 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 her final exam. This suggests that

- A. the scores on the final exam and the first midterm are negatively correlated.
- B. the scores on the final exam and the first midterm are positively correlated.
- C. the scores on the final exam and the first midterm are not very highly correlated.
- D. Dr. Hackle should change the final so it is more fair to the students who are doing well in her course.



216. A correlation between two variables exists when scores on one variable

- A. are different from the scores on the second variable.
- B. cause or determine the scores on the second variable.
- C. are related to scores on the second variable.
- D. are unrelated to scores on the second variable.

217. A numerical index of the degree of relationship between two variables is the

- A. causation coefficient.
- B. correlation coefficient.
- C. experimental coefficient.
- D. variable coefficient.

218. If two variables have a positive correlation, you would expect that \_\_\_\_ scores on one variable are generally associated with \_\_\_\_ scores on the second variable.

- A. low; low
- B. low; high
- C. middle; a wide variety of
- D. high; low

219. As an adult ages, his/her physical strength declines. The relationship between age and physical strength is a(n)

- A. nonexistent correlation.
- B. equal correlation.
- C. positive correlation.
- D. negative correlation.

220. If there is a relationship between amount of coffee consumed daily and number of hours slept, such that people who drink a lot of coffee tend to sleep very little (and people who drink little coffee tend to sleep a lot), coffee consumption and hours slept would show a(n)

- A. increasing correlation.
- B. decreasing correlation.
- C. positive correlation.
- D. negative correlation.

221. A correlation coefficient will always have a value between

- A. 0% and 100%.
- B. -10.00 and +10.00.
- C. -1.00 and +1.00.
- D. 0 and +1.00.

222. A high correlation coefficient (either positive or negative) indicates that
- A. there is a high level of consistency in the relationship between the two variables.
  - B. the scores on the two variables are nearly identical.
  - C. a change in one variable causes a change in the second variable.
  - D. a third factor or variable is always responsible for the relationship between the two variables.

223. Which of the following correlation coefficients indicates the strongest relationship between two variables?
- A. -1.51
  - B. -.80
  - C. 0
  - D. +.50

224. Which of the following statements is NOT correct concerning the correlation coefficient?
- A. a value near zero indicates no relationship between the two variables
  - B. high values indicate that the two variables have a cause and effect relationship
  - C. the type of relationship between the two variables is described by whether the value is positive or negative
  - D. the strength of the relationship between the two variables is described by the mathematical value

225. A correlation coefficient of zero describes
- A. a positive relationship between two variables.
  - B. a negative relationship between two variables.
  - C. the lack of a relationship between two variables.
  - D. a perfect relationship between two variables.

226. Dr. Redding has found a correlation of +0.65 between snoring and weight. This indicates that
- A. overweight individuals tend to snore less than underweight individuals.
  - B. there is no relationship between weight and snoring.
  - C. overweight individuals tend to snore more than underweight individuals.
  - D. individuals who go on a diet will most likely begin to snore.

227. Of the following, the correlation coefficient that indicates the strongest relationship between the two variables being measured is
- A. +0.65.
  - B. -0.89.
  - C. 0.00.
  - D. +3.45.

228. Of the following, the correlation coefficient that indicates the weakest relationship between the two variables being measured is

- A. +0.95.
- B. -0.69.
- C. +0.01.
- D. -4.50.

229. Of the following correlation coefficients, the one that would allow the most accurate predictions of one variable based on the other variable would be

- A. 0.00.
- B. +1.24.
- C. +0.65.
- D. -0.79.

230. Of the following correlation coefficients, the one that would yield the least accurate predictions of one variable based on the other variable would be

- A. 0.00.
- B. +0.99.
- C. +0.17.
- D. -0.49.

231. Dr. Zelke surveys 50 university students to discover the relationship between textbook price and ratings of readability. Dr. Zelke finds that for these two variables the correlation coefficient is -0.70. This indicates that

- A. more expensive books tend to receive higher readability ratings than less expensive books.
- B. there is no relationship between textbook price and ratings of readability.
- C. increasing a textbooks price will cause a decrease in its readability rating.
- D. more expensive books tend to receive lower readability ratings than less expensive books.

232. If the correlation coefficient between amount of exposure to television violence and aggressive behavior was found to be +0.43, we could conclude that

- A. watching television violence tends to cause aggressive behavior.
- B. being an aggressive person tends to cause one to watch more violent television.
- C. people who watch the most television tend to be the least aggressive.
- D. there is a positive relationship between these two variables.

233. Which of the following statements about correlations is incorrect?

- A. A and B correlate +1.00; therefore, they are causally related.
- B. A and B correlate +1.00; if you know A you can predict B without error.
- C. A and B correlate -1.00; if you know A you can predict B without error.
- D. A correlation of +.90 gives better predictability than a correlation of +.60.

234. The information on getting more out of lectures presented in the Personal Application section in Chapter 1 suggests that absences from classes and grade average in the class are correlated. The best conclusion that can be drawn from this information is that

- A. higher class attendance causes higher class grades.
- B. higher class grades causes increased class attendance.
- C. high class absences causes lower class grades.
- D. class attendance and grades are related.

235. As correlation coefficients \_\_\_\_\_, the ability to predict one variable based on knowledge of the second variable increases.

- A. become positive
- B. become negative
- C. increase in strength
- D. decrease in strength

236. If A and B are highly correlated, which statement MOST accurately describes the relationship between A and B?

- A. the score on A causes the score on B
- B. the score on B causes the score on A
- C. both A and B are caused by a third variable
- D. the score on A can be used to predict the score on B

237. Statistics that are used to interpret data and draw conclusions are called

- A. descriptive statistics.
- B. inferential statistics.
- C. numerical statistics.
- D. significant statistics.

238. Inferential statistics help us determine whether \_\_\_\_\_ played a role in an experiment.

- A. chance
- B. a dependent variable
- C. a normal distribution
- D. genetics

239. "Statistically significant" means that the results of an experiment most likely

- A. resulted from chance variations.
- B. were not due to chance.
- C. had practical significance.
- D. were important.

240. Paulo tells you that he just completed an experiment in his botany class, and the results he obtained were statistically significant. This means that the results he obtained

- A. are important and will likely have an impact in the field of botany.
- B. were unlikely to be a result of chance variations in his sample.
- C. will be of interest to people, even if they are not botanists.
- D. were likely to be the result of chance variations in his sample.

241. Helen conducted a study in which she measured the response time for males and females to complete a spatial task. She found that the mean response time was 1.48 minutes for males and 1.63 minutes for females. For Helen to be confident that an actual difference exists between the males and females in her study, she must

- A. calculate a correlation coefficient.
- B. redo the experiment.
- C. obtain a larger sample.
- D. calculate an inferential statistic.

242. Inferential statistics

- A. are numerical indexes of the degree of relationship between two variables.
- B. are used to organize and summarize data.
- C. are used to interpret data and draw conclusions.
- D. indicate the probability that the observed findings are due to chance.

243. Researchers use \_\_\_\_ to determine whether the observed difference between the two groups in the study was large enough to support the hypothesis.

- A. mathematical statistics
- B. inferential statistics
- C. descriptive statistics
- D. correlational statistics

244. When research results are said to be statistically significant it means that

- A. the probability that the observed findings are due to chance is very low.
- B. the observed findings are important.
- C. the observed findings are interesting.
- D. the observed findings are both important and interesting.

245. A sample is representative if

- A. only volunteer subjects are used.
- B. it is as different from the population as possible.
- C. all subjects are chosen from a single, unusual segment of the population.
- D. its composition is similar to the composition of the population.

246. By definition, a sample

- A. is that group of people to whom the conclusion of the study will apply.
- B. is a subset of the population who actually participate in a research study.
- C. contains less than 50 people or animals.
- D. must only include volunteers who express an interest in the study.

247. To determine whether students would like more courses scheduled in the late afternoon and evening hours, the Student Services department sends questionnaires to 50 students selected at random from the 5,000 who are registered at the campus. In this instance, the 5,000 students who are registered at the campus would be

- A. a population.
- B. a representative sample.
- C. a biased sample.
- D. the independent variable.

248. To discover whether residents of a city are in favor of building a new sports stadium, the team's owner randomly selected and interviewed 500 of the city's 500,000 residents. In this instance, the 500 people that the owner interviewed would be

- A. a biased sample.
- B. a population.
- C. the dependent variable.
- D. a representative sample.

249. To generalize results to a population, we must first

- A. select a biased sample from the population of interest.
- B. oversample selected subgroups in the population.
- C. draw a representative sample from the population of interest.
- D. ensure that all the variables have been operationally defined.

250. A researcher who is conducting an opinion survey asks viewers who are watching a political debate to dial a 1-800 number and record their opinion to the "question of the day." In this case the researcher is likely to have

- A. a representative sample.
- B. a random sample.
- C. a biased sample.
- D. a random population.

## Chapter 2 A--The Research Enterprise in Psychology **Key**

1. The scientific approach assumes that
  - A.** events are governed by some lawful order.
  - B. each event is completely unique.
  - C. there are no general laws or principles that apply to human behavior.
  - D. the search for absolute truth is the ultimate goal.
  
2. Answering the question of "how" something works is most closely associated with which goal of science?
  - A. the search for truth
  - B. application and control
  - C.** measurement and description
  - D. understanding and prediction
  
3. Which is NOT among the goals of psychology?
  - A. the development of measurement techniques for describing behavior precisely and accurately
  - B. understanding why certain behaviors occur
  - C. applications of research findings to solve everyday problems
  - D.** searching for absolute truths about behavior
  
4. Answering the question of "why" something happens is most closely associated with which goal of science?
  - A. the search for truth
  - B. application and control
  - C. measurement and description
  - D.** understanding and prediction
  
5. IQ score, age, weight, grade point average, and income are all examples of
  - A. constants.
  - B.** variables.
  - C. correlations.
  - D. statistics.



6. Any measurable conditions, events, characteristics, or behaviors that are controlled or observed in a study are called
- A. hypotheses.
  - B. correlations.
  - C. variables.**
  - D. confounds.
7. The use of reinforcement principles to modify a child's unruly behavior reflects the goal of science that deals with
- A. understanding and prediction.
  - B. measurement and description.
  - C. deterministic and teleological.
  - D. application and control.**
8. The scientific approach assumes that
- A. events will always remain unpredictable.
  - B. events are governed by some lawful order.**
  - C. events occur in a random order.
  - D. events are the result of unseen causes.
9. The \_\_\_\_ approach assumes that events are governed by some lawful order.
- A. philosophical
  - B. mechanical
  - C. scientific**
  - D. cognitive
10. Which of the following is NOT one of the three goals of science?
- A. application and control
  - B. measurement and description
  - C. construction and revision**
  - D. understanding and prediction
11. The use of \_\_\_\_ allow scientists to objectively \_\_\_\_ behavior.
- A. application tools; understand
  - B. application tools; describe
  - C. measurement techniques; understand
  - D. measurement techniques; describe**

12. When a scientist attempts to explain why "something happened," his work is MOST closely associated with which goal of science?
- A. application and control
  - B. construction and revision
  - C. measurement and description
  - D. understanding and prediction**
13. If a psychologist hopes that his research will help to solve some practical problem, his hope reflects which goal of science?
- A. application and control**
  - B. construction and revision
  - C. understanding and prediction
  - D. measurement and description
14. A tentative statement about the relationship between two or more variables is a(n)
- A. variable.
  - B. hypothesis.**
  - C. theory.
  - D. operational definition.
15. Theories permit researchers to move from
- A. understanding to application.
  - B. concept to description.
  - C. application to control.
  - D. description to understanding.**
16. A scientific theory has to be
- A. true.
  - B. accepted by others.
  - C. testable.**
  - D. well established and not disputed.
17. Theory construction is
- A. a gradual iterative process that is always subject to revision.**
  - B. a standard step-like process that quickly moves toward the truth.
  - C. a circular process that typically leads nowhere.
  - D. a process that results in concrete findings that are accepted by other scientists.

18. Dr. Marqueta believes that "misery loves company." Based on this belief, Dr. Marqueta predicts that people who have received bad news will seek out other people. Dr. Marqueta's belief is an example of \_\_\_\_\_, and her prediction is an example of \_\_\_\_\_.

- A. a hypothesis; a theory
- B. a theory; a hypothesis**
- C. a variable; an application
- D. a hypothesis; a variable

19. A tentative statement about the relationship between two or more variables is a

- A. cause.
- B. theory.
- C. hypothesis.**
- D. research method.

20. Mrs. Smith, an elementary school teacher, believes that girls are smarter than boys. She predicts that the girls in her class will learn more than the boys during the school year. Her prediction is a(n)

- A. hypothesis.**
- B. opinion.
- C. fact.
- D. theory.

21. A theory is

- A. an objective description of behavior.
- B. a system of interrelated ideas used to explain a set of observations.**
- C. the application of research to practical problems.
- D. a statement about the relationship between two or more variables.

22. Scientific theories are most directly associated with which goal of science?

- A. application and control
- B. construction and revision
- C. measurement and description
- D. understanding and prediction**

23. A clinical psychologist notes that an unusually large number of obese people are depressed or anxious, and she offers an explanation that excess weight causes emotional disorders. Her explanation is a(n)

- A. hypothesis.
- B. theory.**
- C. opinion.
- D. fact.

24. While theories are most closely associated with the scientific goal of \_\_\_\_\_, hypotheses are most closely associated with the goal of \_\_\_\_\_.

- A. application; description
- B. description; application
- C. understanding; prediction**
- D. prediction; understanding

25. A hypothesis is

- A. a random guess as to what might happen in an experiment.
- B. a tentative statement about the relationship between two or more variables.**
- C. a conclusion drawn from an experiment.
- D. a system of interrelated ideas used to explain a set of observations.

26. Hypotheses are typically expressed as

- A. theories.
- B. variables.
- C. predictions.**
- D. statistics.

27. Dr. Licciardi predicts that if people are observed while they perform a complex task they will make more errors. Dr. Licciardi's prediction is an example of

- A. a hypothesis.**
- B. an operational definition.
- C. a theory.
- D. inferential statistics.

28. Dr. Malm predicts that if teachers ignore students who act up in class, fewer students will act up in class. Dr. Malm's prediction is an example of

- A. an operational definition.
- B. a theory.
- C. inferential statistics.
- D. a hypothesis.**

29. A researcher is measuring the heart rate of subjects as an index of anxiety. In this study, heart rate is

- A. a confounded variable.
- B. negatively correlated with anxiety.
- C. an independent variable.
- D. an operational definition of anxiety.**

30. Dr. Dobbins wants to study attachment patterns in single-parent families. The first step in her scientific investigation would be to

- A. design the study and select the research method.
- B. analyze the data.
- C.** formulate a testable hypothesis.
- D. collect the data.

31. If you believe that increasing levels of anxiety are associated with drug abuse, you have just formulated

- A. an epiphenomenon.
- B. a theory.
- C. a correlation.
- D.** a hypothesis.

32. An operational definition

- A.** describes the actions and procedures used to measure or control a variable.
- B. separately defines each term used.
- C. provides a logical basis for each term.
- D. states relationships to other variables.

33. Dr. Critell is studying aggression in children and plans to define aggression as the number of times one child pushes or strikes another child. Defining aggression in this way would

- A. be an example of a hypothesis.
- B. violate ethical guidelines for psychological research.
- C.** represent an operational definition.
- D. require a double-blind research design.

34. A researcher is interested in examining whether relaxation techniques help decrease the perception of anxiety in subjects. The second step in this scientific investigation would be

- A.** to design the study and select the research method.
- B. to analyze the data.
- C. to formulate a testable hypothesis.
- D. to collect the data.

35. When subjects are administered a series of written questions designed to assess their attitudes, opinions, or behavior, this is called

- A. direct observation.
- B.** a questionnaire.
- C. an interview.
- D. a psychological test.

36. A psychologist monitors changes in the subject's heart rate as the subject watches a violent movie. The data collection technique being used is

- A. direct observation.
- B. psychological testing.
- C.** physiological recording.
- D. archival records.

37. A standardized measure used to obtain a sample of a person's behavior is called

- A.** a psychological test.
- B. a case study.
- C. an experiment.
- D. a survey.

38. Jackson is working with a company to help them develop more effective training programs for their employees. He has spent a great deal of time reviewing all the documentation the company has about previous training opportunities they have provided for their employees. Up to this point in time, Jackson has been engaged in

- A. psychological testing.
- B.** archival research.
- C. direct observation.
- D. meta-analysis.

39. Two of the data collection techniques that are most likely to involve direct contact between the researcher and the research participant are

- A.** direct observation and interviews.
- B. archival research and psychological testing.
- C. questionnaires and interviews.
- D. archival research and questionnaires.

40. Laura answered a series of written questions that asked about her attitudes and opinions on a number of current issues. The method of data collection that was being used in this case was

- A. a standardized psychological test.
- B. archival research.
- C. direct observation.
- D.** a questionnaire.

41. The FINAL step in a scientific investigation is to

- A. conduct the study.
- B. analyze the data.
- C. decide whether or not the hypothesis was supported.
- D.** report the findings.

42. A scientific journal refers to

- A. a personal diary kept by a scientist.
- B.** a periodical that publishes technical and scholarly articles.
- C. a detailed record of the daily procedures followed in conducting a study.
- D. a collection of biographies of famous scientists.

43. Publication of research findings is extremely important to the scientific method because

- A.** it allows for critique and self-correction.
- B. it brings recognition to the research worker.
- C. it forces the writer to be clear.
- D. the royalties help the researcher pay for the research.

44. The first step in a scientific investigation is

- A. to develop a theory.
- B.** to formulate a testable hypothesis.
- C. to collect the data.
- D. to select the research method and design the study.

45. In scientific investigations a researcher must clearly define the variables under study by precisely describing how they will be measured or controlled. These definitions are referred to as

- A. objective definitions.
- B. precise definitions.
- C.** operational definitions.
- D. dictionary definitions.

46. A psychologist measures blood alcohol level to determine intoxication. In this example, blood alcohol level is the \_\_\_\_ definition of intoxication.

- A.** operational
- B. dictionary
- C. objective
- D. precise

47. A researcher decides exactly how his research project will be conducted when

- A. analyzing the data and drawing conclusions.
- B.** selecting a research method and designing the study.
- C. formulating a testable hypothesis.
- D. collecting the data.

48. Psychologists use a variety of data collection techniques; which of the following is well suited for studying attitudes?

- A.** questionnaires
- B. direct observations
- C. psychological tests
- D. physiological recordings

49. Statistical procedures are used during which step in conducting a scientific investigation?

- A. collect the data
- B. select a research method and design the study
- C. report the findings
- D.** analyze the data and draw conclusions

50. Most typically, researchers report their findings

- A. by holding a press conference.
- B. in a book.
- C. in a scientific magazine.
- D.** in a journal.

51. Which of the following is NOT true regarding common sense analyses of behavior?

- A. they tend to be vague and ambiguous
- B. they often tolerate contradictory generalizations
- C. they usually involve little effort to verify ideas or detect errors
- D.** they are typically based on precise definitions and hypotheses

52. Which of the following is NOT an advantage of the scientific approach?

- A. clarity
- B. precision
- C.** acceptance of a degree of error
- D. skepticism



53. The scientific approach requires that people specify exactly what they are talking about when they formulate hypotheses. Which advantage of scientific investigation does this illustrate?
- A.** precision
  - B. acceptance of a degree of error
  - C. skepticism
  - D. operational definitions
54. The two main advantages of the scientific approach are science's
- A. commonsense approach and intolerance of error.
  - B. commonsense approach and easy acceptance of the research findings of others.
  - C.** clarity and precision and intolerance of error.
  - D. clarity and precision and easy acceptance of the research findings of others.
55. Operational definitions are most closely associated with which major advantage of the scientific approach?
- A. commonsense approach
  - B.** clarity and precision
  - C. intolerance of error
  - D. tolerance of error
56. The different general strategies for conducting scientific investigation are referred to as
- A. data collection techniques.
  - B. operational definitions.
  - C.** research methods.
  - D. hypotheses.
57. The two main types of research methods used in psychology are the
- A.** experimental and descriptive/correlational research methods
  - B. experimental and case study research methods
  - C. descriptive and correlational research methods
  - D. descriptive/correlational and case study research methods
58. The experiment is a research method in which the investigator
- A. systematically observes two variables to see whether there is an association between them.
  - B. observes behavior as it occurs in its natural environment.
  - C. conducts an in-depth investigation of an individual subject.
  - D.** manipulates a variable under carefully controlled conditions and observes whether there are changes in a second variable as a result.

59. Manipulating a variable under carefully controlled conditions and observing the changes in a second variable defines

- A. the testing approach.
- B. the survey approach.
- C.** the experimental approach.
- D. naturalistic observation.

60. A researcher wants to see if a protein-enriched diet will enhance the maze-running performance of rats. One group of rats is fed the high-protein diet for the duration of the study; the other group continues to receive ordinary rat chow. In this experiment, the rats' maze-running performance is the

- A. correlated variable.
- B. control variable.
- C.** dependent variable.
- D. independent variable.

61. In an experiment, the variable that is controlled or manipulated by the researcher is called the

- A. dependent variable.
- B.** independent variable.
- C. control variable.
- D. stimulus variable.

62. An independent variable in an experiment refers to

- A. the variable that is held constant across experimental conditions.
- B.** the variable deliberately manipulated by the experimenter.
- C. the variable that the experimenter believes will change in value because of systematic correlations that exist in the experiment.
- D. the variable that provides an alternative explanation for the results of the experiment.

63. A group of researchers is investigating the effects of ginkgo biloba on memory. During the first part of the study the animals learn to run a maze while they are not receiving the supplement; in the second part of the study the animals learn to run a different maze while they are receiving the supplement. In each case the researchers count how many trials it takes before the animals can run the maze pattern without making any errors. In this study, the independent variable is

- A. the type of animal that the researchers select for the study.
- B.** the presence or absence of the food supplement in the animal's diet.
- C. the number of trials it takes to run the maze without making any errors.
- D. the age of the animals in the study.

64. A group of researchers wanted to determine if people will eat more food in a room with red paint and red decorations than in a room that is decorated blue. Half the participants in this study ate in a red room and half ate in a blue room. The researchers then measured how much food was consumed in each of the two rooms. In this study, the independent variable was

- A. the type of food that was available during the study.
- B. the amount of food that was consumed.
- C.** the color of the decorations in the room.
- D. how hungry the participants were at the end of the study.

65. Researchers who were studying plant growth raised plants in two separate rooms. One room had taped conversations playing 24 hours a day; the other room was silent. The researchers found that the plants grew better in the room which had the conversations playing. In this study, the type of room (conversation or silence) would be

- A. the dependent variable.
- B. an extraneous variable.
- C. a placebo.
- D.** the independent variable.

66. Researchers who were studying memory had participants learn a list of words after consuming a soft drink with caffeine or a decaffeinated version of the same soft drink. The researchers then counted the number of words that were recalled from the list. In this study, the type of beverage (caffeinated or decaffeinated) would be

- A.** the independent variable.
- B. an extraneous variable.
- C. the dependent variable.
- D. a placebo.

67. A dependent variable in an experiment refers to the variable

- A. held constant across the experimental conditions.
- B. deliberately manipulated by the experimenter.
- C.** that changes value because of the systematic manipulation in the experiment.
- D. that the experimenter is depending on to cause something to happen in the experiment.

68. Researchers studying the effects of sleep deprivation tested the physical coordination skills of 25-year-old males who had been sleep deprived for either 24, 36, or 48 hours. In this study, the dependent variable would be

- A. the age of the research participants.
- B.** the physical coordination skills of the men in the study.
- C. the length of time the participants had been sleep deprived.
- D. the type of physical coordination task the researchers use.

69. A group of researchers wants to determine if people are more likely to follow directions if the person giving the directions is in a uniform. Half the participants are directed to a parking spot by a uniformed security guard, the other half are directed to a parking spot by an individual wearing blue jeans and a t-shirt. In this study, the dependent variable would be

- A.** the number of participants who park in the spot they are directed to.
- B. the type of clothing worn by the person giving the directions.
- C. the gender of the person driving into the parking lot.
- D. the distance between the parking spot and the entrance.

70. A group of researchers conducts a study to determine if children's performance is affected by the presence of other children. First, the children are taken to a room with no other children and timed while they complete a puzzle. Later, the same children are taken to a room with four other children and timed while they complete a similar puzzle. In this study, the length of time it takes to complete the puzzle would be

- A. the independent variable.
- B. an extraneous variable.
- C. a control variable.
- D.** the dependent variable.

71. An industrial designer wants to determine if the new design for a piece of office equipment will result in fewer errors. The designer sets up a machine with the old design in one room, and a machine with the new design in a second room. He counts how many errors are made using each of the two machines. In this study, the number of errors that are made would be

- A. a control variable.
- B.** the dependent variable.
- C. the independent variable.
- D. an extraneous variable.

72. If we view an experiment as an attempt to establish a cause-effect relationship, the \_\_\_\_ variable would be the cause, and the \_\_\_\_ variable would be the effect.

- A. dependent; independent
- B.** independent; dependent
- C. control; experimental
- D. independent; confounded

73. A researcher found that clients who were randomly assigned to same-sex groups participated more in group therapy sessions than clients who were randomly assigned to coed groups. In this experiment, the dependent variable was

- A.** the amount of participation in the group therapy sessions.
- B. whether or not the group was coed.
- C. the clients' attitudes toward group therapy.
- D. how much the clients' mental health improved.

74. The experimental group

- A.** consists of the subjects who receive some special treatment with regard to the independent variable.
- B. consists of the subjects who receive some special treatment with regard to the dependent variable.
- C. consists of the subjects who do not receive the special treatment.
- D. must be chosen so as to be as different from the control group as possible.

75. In an experiment designed to test memory processes, one group was given special instructions and asked to group the items on a list into categories while they tried to memorize them. A second group of participants was given the same list, but they did not receive any special instructions. In this study, the experimental group is

- A. the group in which the participants remember the least items from the list.
- B. the group who did not receive any special instructions.
- C.** the group who received the special instructions.
- D. the group in which the participants remember the most items from the list.

76. In a study designed to test the effects of a new drug developed to treat Alzheimer's disease, half the patients were given the actual drug while the other half of the patients were given a placebo (sugar pill). In this study, the experimental group is

- A. the patients who show evidence of an improvement in their memory.
- B.** the group who received the actual drug.
- C. the group who received the placebo.
- D. the patients who were not included in the study.

77. David and Alexandra both take part in a research study that is investigating the effects of sleep deprivation on reaction time. David is kept awake for 24 hours straight, while Alexandra follows her normal sleep routine. In this study, David is part of the

- A. hypothesis group.
- B.** experimental group.
- C. control group.
- D. dependent variable group.

78. The purpose of the control group is to

- A. make the experiment more complex.
- B.** isolate the effect of the independent variable on the dependent variable.
- C. make statistical significance more likely.
- D. isolate the effect of the dependent variable on the independent variable.

79. A researcher wants to see if a protein-enriched diet will enhance the maze-running performance of rats. One group of rats is fed the high-protein diet for the duration of the study; the other group continues to receive ordinary rat chow. In this experiment, the group of rats that is fed the high-protein diet is \_\_\_\_ group; the group that receives ordinary rat chow is \_\_\_\_ group.

- A. a control; a control
- B. a control; an experimental
- C. an experimental; an experimental
- D. an experimental; a control**

80. A researcher has children watch 30 minutes of violent television, and then counts the number of times they hit each other afterward in a one-hour play period as a measure of aggression. The researcher concludes that television violence causes aggression. However, this conclusion may be invalid because

- A. the study is strictly correlational.
- B. aggression wasn't operationally defined.
- C. there was no control group.**
- D. it is unethical to force children to watch violent television.

81. A group of researchers wanted to determine whether children would behave more aggressively after watching violent television programming. Half the children in the study watched a violent television show; the other children watched a non-violent television program. In this study, the control group is the children who

- A. behave the most aggressively at the end of the study.
- B. watch the non-violent program.**
- C. watch the violent show.
- D. behave the least aggressively at the end of the study.

82. Jason believes that patrons in his bar will be more likely to leave a tip if the tip jar already has some money in it, than if 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 Jason's experiment, the control group would be

- A. all the patrons who leave a tip when they leave the bar.
- B. the patrons who see a tip jar that contains at least \$5.00.
- C. the patrons who see an empty tip jar.**
- D. all the patrons who leave the bar without tipping Jason.

83. Dr. Prutherow believes that people who are under stress will develop more colds than people who are not under stress. When he randomly selects 10 participants and exposes them to high levels of stress, he finds that 9 of the participants develop colds. Based on these results he concludes that stress causes an increase in colds. Dr. Prutherow's reasoning may be flawed because in this study

- A. there was no dependent variable in his study.
- 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.

84. By definition, an extraneous variable is

- A. a variable that affects the control group but not the experimental group.
- B. the same thing as a dependent variable.
- C. a variable that is completely irrelevant to both the independent and dependent variables.
- D.** a variable, other than the independent variable, that may influence the dependent variable.

85. A variable, other than the independent variable, that appears to have influenced the dependent variable in a study is referred to as

- A. a covariate.
- B.** an extraneous variable.
- C. a redundant variable.
- D. an inverse bias.

86. When two variables are linked and their individual effects cannot be separated out, we speak of the variables as being

- A. independent variables.
- B. dependent variables.
- C.** confounded variables.
- D. codependent variables.

87. Diaz conducts a decision-making experiment to determine if people reason more logically when they have more time to decide. All the participants who are under 40 are allowed 15 minutes to reach a decision about a problem; all the participants who are over 40 are allowed 20 minutes to reach a decision about the same problem. Diaz has a problem with his experimental design because

- A. there are two control groups and no experimental group.
- B. the time allowed for the decision is confounded with the independent variable.
- C. there is no dependent variable in the experiment.
- D.** the age of the participants is confounded with the independent variable.

88. In experiments, placing subjects in experimental groups such that each subject has an equal probability of ending up in any experimental group is referred to as

- A. random selection.
- B. random sampling.
- C. random forecasting.
- D.** random assignment.

89. Random assignment of subjects occurs when

- A. subjects are allowed to choose which group or condition they would like to be in.
- B. a different method is used to assign each subject to a group or condition.
- C.** all subjects have an equal chance of being assigned to any of the groups or conditions.
- D. all topics have an equal chance of being assigned to a particular experimenter.

90. Dr. Kalmagura plans on introducing a new exam review procedure in his chemistry classes. To check the effectiveness of the new procedure he is going to have half his students try the new technique for one semester, while the remaining students review in the way they have always done in the past. He asks each student to decide which of the techniques they would like to use, the new technique or the standard technique. In this example, Dr. Kalmagura's procedure illustrates

- A.** the use of non-random assignment.
- B. a correlational research design.
- C. a double-blind research design.
- D. what is meant by informed consent in research.

91. Bill received a poor performance evaluation in his job last year. Since then Bill has started working through his lunch hour, he has taken on four special projects, and enrolled in night classes to upgrade his computer skills. If Bill receives a better evaluation at his next performance it will be hard for him to figure out why because

- A. he failed to use a double-blind procedure to test his hypothesis.
- B. he didn't formulate a research hypothesis before implementing the changes.
- C. none of the actions he took are likely to be related to his overall job performance.
- D.** the three actions he took are confounded with each other.

92. Derrick designed an experiment in which participants listened to a persuasive speech delivered either by a person who was very tall or a person who was average in height. In addition, the speeches were delivered either by individuals wearing business clothes or by people wearing casual clothes. In this example, Derrick

- A. has two dependent variables, and will be able to determine if persuasion interacts with any other factors.
- B.** has two independent variables, and will be able to determine if height and style of clothing interact.
- C. does not have a control group, which should reduce the impact of self-reporting bias in his study.
- D. is using a double-blind procedure, which should reduce experimenter bias.

93. The research method in which the investigator manipulates a variable under carefully controlled conditions and observes whether any changes occur in a second variable as a result is the

- A. scientific method.
- B. correlational method.
- C. descriptive method.
- D.** experimental method.



94. The experimental method is a research method in which the investigator manipulates a variable under carefully controlled conditions and then

- A.** observes whether any changes occur in a second variable as a result.
- B. correlates the resulting behavior.
- C. observes behavior in its natural environment.
- D. surveys participants to learn their assessment of the variable.

95. In experimental research, the variable that is manipulated by the researcher so that its impact on another variable may be assessed is the

- A. extraneous variable.
- B. dependent variable.
- C.** independent variable.
- D. controlled variable.

96. In experimental research, the independent variable is the variable

- A. that is thought to be affected by the manipulated variable.
- B.** the researcher controls or manipulates.
- C. that is considered an extraneous variable.
- D. that is correlated with the second variable.

97. In experimental research, the variable that the researcher measures because it is thought to be affected by the manipulation of another variable is the

- A. extraneous variable.
- B.** dependent variable.
- C. independent variable.
- D. controlled variable.

98. In experimental research, the dependent variable is the variable

- A.** that is thought to be affected by the manipulated variable.
- B. the researcher controls or manipulates.
- C. that is considered an extraneous variable.
- D. that is correlated with the second variable.

99. In experimental research, the researcher manipulates the \_\_\_\_ variable in order to measure its effect on the \_\_\_\_ variable.

- A. dependent; independent
- B. dependent; extraneous
- C.** independent; dependent
- D. independent; extraneous

100. In experimental research, the data collected by the researcher are the

- A. primary variable.
- B. secondary variable.
- C. independent variable.
- D.** dependent variable.

101. If a researcher varies the loudness of music in a factory to observe its effect on the rate of productivity of the employees, the independent variable is the

- A. factory setting.
- B. rate of productivity.
- C. style of music being played.
- D.** loudness of the music being played.

102. If a researcher varies the loudness of music in a factory to observe its effect on the rate of productivity of the employees, the dependent variable is the

- A. factory setting.
- B.** rate of productivity.
- C. style of music being used.
- D. loudness of music being used.

103. A researcher is investigating the effect of high room temperatures on aggressive behavior in preschoolers. Half of the children are in a classroom where the temperature is a warm 88 degrees and half are in a classroom where the temperature is a normal 77 degrees. The researcher measures the number of hitting incidents that occur in each classroom. In this study the temperature of the room is the

- A. dependent variable.
- B. experimental group.
- C. control group.
- D.** independent variable.

104. A researcher is investigating the effect of warm room temperature on aggressive behavior in preschoolers. Half of the children are in a classroom where the temperature is a warm 88 degrees and half are in a classroom where the temperature is a normal 77 degrees. The researcher measures the number of hitting incidents that occur in each classroom. In this study the number of hitting incidents is the

- A.** dependent variable.
- B. experimental group.
- C. independent variable.
- D. control group.

105. In experimental research, subjects in the experimental group

- A. receive the dependent variable.
- B. do not receive the dependent variable.
- C.** receive some special treatment in regard to the independent variable.
- D. do not receive some special treatment in regard to the independent variable.

106. In experimental research, subjects that receive some special treatment in regard to the independent variable are the

- A.** experimental group.
- B. control group.
- C. observational group.
- D. correlational group.

107. In experimental research, subjects that do NOT receive some special treatment in regard to the independent variable are the

- A. experimental group.
- B.** control group.
- C. observational group.
- D. correlational group.

108. In experimental research, while subjects in the \_\_\_\_ group received some special treatment in regard to the independent variable, subjects in the \_\_\_\_ group did not.

- A. control; experimental
- B.** experimental; control
- C. primary; secondary
- D. secondary; primary

109. Subjects in the control group should be \_\_\_\_ subjects in the experimental groups in all respects except for the treatment they receive in regards to the \_\_\_\_.

- A. very different from; independent variable
- B. very different from; dependent variable
- C.** very similar to; independent variable
- D. very similar to; dependent variable

110. A researcher is investigating the effect of high room temperature on aggressive behavior in preschoolers. Half of the children are in a classroom where the temperature is a warm 88 degrees and half are in a classroom where the temperature is a normal 77 degrees. The researcher measures the number of hitting incidents that occur in each classroom. In this study the children in the warm classroom are the

- A. primary group.
- B. secondary group.
- C.** experimental group.
- D. control group.

111. A researcher is investigating the effect of high room temperature on aggressive behavior in preschoolers. Half of the children are in a classroom where the temperature is a warm 88 degrees and half are in a classroom where the temperature is a normal 77 degrees. The researcher measures the number of hitting incidents that occur in each classroom. In this study the children in the normal temperature classroom are the

- A. primary group.
- B. secondary group.
- C. experimental group.
- D.** control group.

112. A researcher is investigating the effect of music on the productivity of employees in a factory. Half of the employees listen to music while working and half do not listen to music. The researcher measures the productivity of each employee. In this study the employees who listen to music are the

- A. independent group.
- B. dependent group.
- C. control group.
- D.** experimental group.

113. A researcher is investigating the effect of music on the productivity of employees in a factory. Half of the employees listen to music while working and half do not listen to music. The researcher measures the productivity of each employee. In this study the employees who do not listen to music are the

- A. independent group.
- B. dependent group.
- C.** control group.
- D. experimental group.

114. Variables, other than the independent variable, that seem likely to influence the behavior of subjects in a study are called

- A. control variables.
- B. dependent variables.
- C. extraneous variables.
- D.** random variables.

115. A researcher tries to make sure that subjects in the experimental and control groups are very similar to each other in order to reduce the effects of

- A.** extraneous variables.
- B. random variables.
- C. dependent variables.
- D. independent variables.

116. Which of the following is NOT a variation that the experimental method can use?

- A. use one group of subjects who serve as both the experimental group and as their own control
- B.** use an experimental group only and have no control group
- C. manipulate more than one independent variable
- D. measure more than one dependent variable

117. In the Featured Study on how expectations influence reaction to positive and negative outcomes, one of the independent variables was

- A. the group that the subject was assigned to (experimental or control).
- B. the actual measurement of the students emotions.
- C. the bogus medical test.
- D.** the subject's expectations about whether the gene deficiency was common or uncommon among college students.

118. In the Featured Study on how expectations influence reaction to positive and negative outcomes, the dependent variable was

- A. the envelope containing the results of the test.
- B.** the actual measurement of the students emotions.
- C. the bogus medical test.
- D. the subject's expectations about whether the gene deficiency was common or uncommon among college students.

119. Your chemistry professor tells the class that his exams are extremely challenging and that most students tend to perform poorly on them while your math professor tells the class that his exams are extremely easy. Upon receiving your exam grades you score very highly on both exams. Based on the results of the Featured Study on how expectations influence emotional reactions to positive and negative outcomes what type of emotional reaction are you likely to show?

- A.** You will feel more highly positive about your chemistry grade than your math grade.
- B. You will feel more highly positive about your math grade than your chemistry grade.
- C. You will be equally pleased about the outcome of both exams.
- D. You will be upset that you did not get 100 on both exams.

120. Your chemistry professor tells the class that his exams are extremely challenging and that most students tend to perform poorly on them while your math professor tells the class that his exams are extremely easy. Upon receiving your exam grades you score very poorly on both exams. Based on the results of the Featured Study on how expectations influence emotional reactions to positive and negative outcomes what type of emotional reaction are you likely to show?

- A. You will feel more negative about your chemistry grade than your math grade.
- B.** You will feel more negative about your math grade than your chemistry grade.
- C. You will be equally pleased about the outcome of both exams.
- D. You will feel more positive about your chemistry grade and more negative about your math grade.

121. In the Featured Study on "The Emotional Fallout of Expected and Unexpected Outcomes" participants' expectations were manipulated by

- A. asking them if they thought they would receive either an "A" or a "C" in a course.
- B. telling them they received either an "A" or a "C" in a course.
- C.** telling them an enzyme deficiency was either very uncommon or very prevalent among college students.
- D. telling them they either had or did not have an enzyme deficiency.

122. In the Featured Study on "The Emotional Fallout of Expected and Unexpected Outcomes" the participants that had the lowest mean emotion rating were the participants who

- A. expected good news and received good news.
- B. expected bad news and received bad news.
- C.** expected good news and received bad news.
- D. expected bad news and received good news.

123. The Featured Study on "The Emotional Fallout of Expected and Unexpected Outcomes" BEST relates to the text's unifying theme

- A. psychology is theoretically diverse.
- B. people's experience of the world is highly subjective.
- C.** behavior is shaped by cultural heritage.
- D. psychology is empirical.

124. Conclusions concerning cause and effect relationships are only possible when the \_\_\_\_ method is used.

- A. survey
- B.** experimental
- C. correlational
- D. descriptive

125. The main advantage associated with the experimental method is

- A.** its precise control.
- B. its ability to duplicate real life in the laboratory.
- C. that it can be used to explore just about everything.
- D. participants usually enjoy taking part in the study.

126. The ability to infer a cause-and-effect relationship is associated only with the

- A. correlational research method.
- B. case history research method.
- C.** experimental research method.
- D. empirical research method.

127. One of the disadvantages of the experimental method is

- A. the inability to generate cause-and-effect conclusions.
- B. the length of time necessary to complete the study.
- C. the fact that only one variable can be studied at a time.
- D.** the fact that experiments often can't be done for practical or ethical reasons.

128. Which of the following is NOT a disadvantage of the experimental method of conducting research?

- A. It cannot be used to study certain issues.
- B. It produces artificial situations that may not be applicable to real life.
- C. It is impossible to manipulate certain variables.
- D.** It is virtually impossible to conduct a true experiment with human beings.

129. One of the disadvantages of the experimental method is

- A. the inability to generate cause-and-effect conclusions.
- B.** the artificial, contrived situations in which experiments are often conducted.
- C. the length of time necessary to complete the study.
- D. the fact that only one variable can be studied at a time.

130. Compared to the other scientific research methods, the principal advantage of the experimental method is it

- A. can easily be used to study all research questions.
- B. allows for a description of behavior.
- C.** permits conclusions about cause and effect relationships.
- D. observes behavior in its natural setting.

131. A disadvantage or limitation of the experimental research method is

- A. the researcher has little control over the situation.
- B. it does not allow for conclusions concerning cause and effect relationships.
- C. it does not allow for a description of behavior.
- D.** it frequently takes place under artificial circumstances.

132. A disadvantage or limitation of the experimental research method is

- A.** because of practical or ethical reasons it cannot be used to study some research questions.
- B. it does not allow for conclusions concerning cause and effect relationships.
- C. it does not allow for a description of behavior.
- D. the researcher has little control over the situation.

133. In descriptive/correlational research, the investigator

- A.** systematically observes two variables to see whether there is an association between them.
- B. manipulates a variable under carefully controlled conditions and observes whether there are changes in a second variable as a result.
- C. exposes subjects to two closely related treatment conditions.
- D. simultaneously manipulates two or more independent variables.

134. Which of the following is NOT listed in the textbook as a descriptive research method?

- A.** criterion-based induction
- B. case studies
- C. surveys
- D. naturalistic observation

135. Naturalistic observation, case studies, and surveys all have in common that

- A. they do not directly observe behavior.
- B.** they do not manipulate the variables under study.
- C. they can show causal relationships.
- D. the results obtained cannot be analyzed statistically.

136. Which research method involves a researcher engaging in careful observation of behavior without intervening directly with the subjects?

- A. criterion-based induction
- B. case studies
- C. surveys
- D.** naturalistic observation



137. Going to a playground for an hour each day for two weeks and recording girl-boy exchanges would be an example of

- A. a case study.
- B. a survey.
- C.** naturalistic observation.
- D. an experiment.

138. Recording all instances of an event for a particular time period (such as how many times an older brother strikes his younger brother) without the subjects' awareness is an example of

- A. compiling a case study.
- B. correlational research.
- C. conducting an experiment.
- D.** naturalistic observation.

139. You are sitting on a park bench in a major metropolitan area from 7 a.m. to 7 p.m. and you note the number of people who walk by, whether or not they litter, and their gender. You are engaging in

- A. casual observation.
- B.** naturalistic observation.
- C. case study research.
- D. experimental research.

140. In compiling case studies clinicians and researchers often focus on information that is consistent with their own theoretical slant. As a result, case studies tend to

- A. be the most accurate records available for the majority of psychological disorders.
- B. lack enough detail to provide any useful insights to other psychologists.
- C.** be highly subjective.
- D. have too many dependent variables.

141. 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. hypotheses cannot be generated about the origin of the behavior.
- C. they cannot be used to study rare or unusual events.
- D.** the experiences reported may not be representative of other cases.

142. A group of researchers wanted to investigate allegations of sexual harassment on a company's assembly line. To make their observations, the researchers took jobs working on the assembly line and pretended to be new employees. In this example, the researchers were using

- A.** naturalistic observation.
- B. correlational research.
- C. survey research.
- D. the case study method of research.

143. A local hospital wanted to assess the way its patients were being treated. The hospital hired several researchers to act as patients and record the way hospital personnel handled the admitting and preliminary evaluation procedures. In this example, the researchers hired by the hospital were engaged in

- A. case study research.
- B.** naturalistic observation.
- C. correlational research.
- D. survey research.

144. The tendency for participants to participate in survey research appears to have

- A. increased noticeably in recent decades.
- B. increased for mail surveys but decreased for phone surveys.
- C. remained relatively constant since the early 1950s.
- D.** declined noticeably in recent decades.

145. Jolyn believed that there were gender differences in driving habits. To test this assumption she stood near a quiet intersection. Jolyn recorded the gender of each driver who approached a stop sign, and also whether the individual came to a complete stop before proceeding into the intersection. Jolyn is conducting

- A. an experiment with two dependent variables.
- B. case study research.
- C.** naturalistic observation.
- D. psychological testing.

146. One advantage of naturalistic observation is that it

- A. approximates the experimental method.
- B. allows for cause-and-effect conclusions to be drawn.
- C.** allows behavior to be studied in realistic settings.
- D. involves random assignment.

147. Which research method involves an in-depth investigation of an individual subject?

- A. an experiment
- B. a case study**
- C. a survey
- D. a naturalistic observation

148. Dr. Kincaid was interested in the topic of autistic savants (individuals with limited abilities in many areas, but with an exceptional talent in one specific area). In the initial part of the investigation Dr. Kincaid carefully observed and compiled detailed files on three individuals who were autistic savants. Dr. Kincaid is conducting **A.** case study research.

- B. survey research.
- C. correlational research.
- D. experimental research.

149. Which of the following techniques is most likely to prove useful in determining why one particular child is afraid to go to school?

- A. experiment
- B. descriptive study
- C. naturalistic observation
- D. case study**

150. If you interviewed a person over a period of time to understand that person to the greatest degree possible, you would be using the

- A. experimental method of research.
- B. correlational method of research.
- C. case study method of research.**
- D. independent variable method of research.

151. NASA wanted to know if extended periods of weightlessness would have an impact on long-term circulatory function. The agency located seven former astronauts who had spent more than one month in space under conditions of weightlessness, and tested all aspects of their cardiovascular function. NASA's research with these seven astronauts would be considered to be

- A. survey research.
- B. experimental research.
- C. correlational research.
- D. case study research.**

152. Which research method involves the use of questionnaires or interviews to gather information about specific aspects of participant's background and behavior?

- A. an experiment
- B. a case study
- C.** a survey
- D. a naturalistic observation

153. One of your friends is writing a research paper and wants to obtain information about the depth of personal information people typically reveal during a first date. Directly observing a large number of people during a first date will be difficult, so your friend asks for your advice on the best way to collect this type of data. The best suggestion would be for your friend to use

- A. the case study approach.
- B. archival research.
- C. a double-blind observational study.
- D.** a survey.

154. Estavan received a questionnaire in the mail asking about his general buying habits. He was asked to identify the specific products that he typically buys, and the amount of each product that he typically uses. If Estavan completes the questionnaire and returns it, he will have taken part in research that incorporates

- A.** the survey method.
- B. naturalistic observation.
- C. a case study approach.
- D. archival research.

155. When studying a research question where it would be impractical to manipulate the variables of interest, a researcher would use a(n)

- A. logical method.
- B. common sense method.
- C. experimental method.
- D.** descriptive/correlational method.

156. Descriptive/correlational research methods allow researchers to

- A. manipulate several variables at the same time.
- B.** examine whether there is a link or association between variables being studied.
- C. draw conclusions concerning cause and effect relationships.
- D. exert precise control over the variables being studied.

157. Which of the following is NOT a descriptive/correlational research method?

- A. survey
- B. experiment**
- C. case study
- D. naturalistic observation

158. Naturalistic observations, case studies, and surveys all have in common that

- A. they take place in an artificial setting.
- B. they involve manipulating the variables of interest in the study.
- C. they involve describing behavior.**
- D. they show cause and effect relationships.

159. The research method in which a researcher engages in careful observation of behavior without intervening directly with the subjects is the

- A. case study method.
- B. correlation method.
- C. survey method.
- D. naturalistic observation method.**

160. In the naturalistic observation method the researcher

- A. uses questionnaires or interviews to gather information about specific aspects of participants' behavior.
- B. engages in careful observation of behavior without intervening directly with subjects.**
- C. manipulates a variable under carefully controlled conditions.
- D. conducts an in-depth investigation of an individual subject.

161. If a researcher studied helping behavior by observing how often shoppers stopped to help an individual pickup dropped packages they would be using the

- A. survey method.
- B. case study method.
- C. naturalistic observation method.**
- D. experimental method.

162. The research method in which a researcher conducts an in-depth investigation of an individual subject is the

- A. case study method.**
- B. correlational method.
- C. survey method.
- D. naturalistic observation method.

163. In the case study method the researcher

- A. uses questionnaires or interviews to gather information about specific aspects of participants' behavior.
- B. engages in careful observation of behavior without intervening directly with subjects.
- C. manipulates a variable under carefully controlled conditions.
- D.** conducts an in-depth investigation of an individual subject.

164. If a researcher is interested in an in-depth study concerning the long-term consequences that physical disabilities have on psychological adjustment, the researcher would be MOST likely to use the

- A. survey method.
- B. naturalistic observation method.
- C. experimental method.
- D.** case study method.

165. A number of techniques such as interviews, direct observations, and psychological testing may be used when a researcher is conducting

- A.** a survey.
- B. a case study.
- C. naturalistic observation.
- D. a correlation.

166. The research method in which a researcher uses questionnaires or interviews to gather information about specific aspects of participants' behavior is the

- A. case study method.
- B. correlation method.
- C.** survey method.
- D. naturalistic observation method.

167. In the survey method the researcher

- A.** uses questionnaires or interviews to gather information about specific aspects of participants' behavior.
- B. engages in careful observation of behavior without intervening directly with subjects.
- C. manipulates a variable under carefully controlled conditions.
- D. conducts an in-depth investigation of an individual subject.

168. The research method that is often used to obtain information concerning individuals' behaviors, attitudes, and/or opinions is the

- A. case study method.
- B. naturalistic observation method.
- C. correlation method.
- D.** survey method.

169. If a researcher is interested in studying individuals' attitudes toward "animal rights issues" they would MOST likely conduct

A. a case study.

**B.** a survey.

C. a correlation.

D. a naturalistic observation.

170. Broadening the scope of phenomena that psychologists are able to study is associated with

**A.** descriptive research methods.

B. introspective research methods.

C. hypothetical deductive research methods.

D. functional research methods.

171. Perhaps the greatest advantage associated with descriptive research methods is

A. a sensitivity to ethical concerns.

B. the isolation of cause and effect linkages in behavior.

C. the ability to focus on specific, isolated behaviors.

**D.** the ability to explore questions that cannot be examined using experimental procedures.

172. Perhaps the greatest disadvantage or limitation associated with descriptive research methods is

A. the inability to look at important variables like nutritional effects on behavior.

B. an insensitivity to ethical concerns.

**C.** the inability to control events and isolate cause and effect linkages.

D. the fact that these methods usually focus attention too narrowly on a single variable.

173. Trevor plans to study the relationship between people's responses to highly stressful situations and their overall health. He decides he must use correlational research, rather than experimental research, to investigate this problem. Trevor most likely chose a correlational method because correlational studies

A. tend to be more accurate than experiments.

B. have higher internal validity than experiments when there are two dependent variables.

C. can be used to study either positive or negative relationships, whereas experiments can only be used to study positive relationships.

**D.** can be used to investigate factors that would be unethical to manipulate in an experimental study.

174. The principal advantage of descriptive/correlational research methods is they

- A. often observe behavior in artificial situations.
- B. permit conclusions concerning cause and effect relationships.
- C.** can examine research questions that because of practical and ethical reasons cannot be studied with other methods.
- D. allow the researcher a high level of control over the variables of interest.

175. A researcher plans to study the relationship between people's smoking behavior and their tendency to have minor physical illnesses (such as colds or the flu). Most likely he will use correlational research for the study because

- A. correlational studies are always the "first choice" of researchers.
- B.** it is not practical or ethical to manipulate people's smoking behavior.
- C. correlational studies allow the researcher to draw strong cause and effect conclusions.
- D. the university does not allow smoking in the psychology building.

176. The principal disadvantage of the descriptive/correlational research method is

- A. because of practical or ethical reasons they cannot be used to study some research questions.
- B.** since researchers cannot control variables of interest, conclusions concerning cause and effect relationships are not appropriate.
- C. they do not allow the researcher to describe behavior.
- D. they frequently observe behavior in artificial situations.

177. The primary reason descriptive/correlational research cannot determine conclusively that variables have a cause and effect relationship is because in conducting the research

- A.** the researcher cannot control events or manipulate variables.
- B. only an experimental group is used.
- C. the data collected frequently comes from direct observations or statements made by subjects.
- D. the researcher observes behavior under artificial situations.

178. The use of mathematics to organize, summarize, and interpret numerical information is referred to as

- A. calculus.
- B. functional analysis.
- C.** statistics.
- D. algebra.



179. Statistics can be used to do all of the below EXCEPT

- A. summarize observations.
- B. organize observations.
- C. interpret observations.
- D.** prove observations.

180. The two basic types of statistics are

- A.** descriptive and inferential.
- B. central tendency and variability.
- C. sampling and correlative.
- D. parametric and nonparametric.

181. Statistics that are used to summarize and organize data are called

- A.** descriptive statistics.
- B. numerical statistics.
- C. inferential statistics.
- D. computational statistics.

182. The score that falls exactly in the center of a distribution of scores, such that half the scores fall below that score and half the scores fall above it, is the

- A. mean.
- B. standard deviation.
- C. range.
- D.** median.

183. The median is

- A.** the score that falls exactly in the center of a distribution.
- B. the arithmetic average of the scores in a distribution.
- C. the score that occurs most frequently in a distribution.
- D. the difference between the largest and the smallest scores in a distribution.

184. Your grade point average is an example of which measure of central tendency?

- A. median
- B.** mean
- C. mode
- D. midpoint

185. The mode in a group of scores describes the \_\_\_\_ for that group of scores.

- A.** central tendency
- B. association with another group of scores
- C. halfway point
- D. variability

186. Charley tells you that 17 out of the 30 students enrolled in his English class scored exactly 62 points on the last exam. Conceptually, this is the same as saying

- A. the mean for that particular English exam was 62 points.
- B. the median for that particular English exam was 62 points.
- C. the standard deviation for that particular English exam was 62 points.
- D.** the mode for that particular English exam was 62 points.

187. When the scores for a recent Chemistry exam were calculated, the mean was 60 and the median was 65. Later the professor discovered that one score had been recorded incorrectly; it had been entered into the computer as a 5, instead of as a 50. When this correction is made,

- A. the median for the exam will change, but the mean will stay the same.
- B. both the mean and the median for the exam will change.
- C.** the mean for the exam will change, but the median will stay the same.
- D. neither the mean nor the median for the exam will be affected.

188. Carla earned 78 points on her statistics exam. Ten of the students in her class earned higher scores than she did, and ten students earned lower scores than she did. Based on this information, you can conclude that Carla's score of 78 points is

- A. the standardized score for her class.
- B.** the median for her class.
- C. the mean for her class.
- D. the mode for her class.

189. In Margaritte's sociology discussion group 4 of the 5 students are between the ages of 19 and 23; the fifth student is 54 years old. If Margaritte wants to report the statistic that best represents the "average" age for her discussion group, she should report either

- A. the mean or the median, because these numbers are typically the same.
- B. the mean or the mode, because these number are not affected by extreme scores.
- C.** the median or the mode, because these numbers will be more representative.
- D. the mean or the standard deviation, so additional statistics can be calculated.

190. The standard deviation is a measure of

- A. central tendency.
- B. the degree of relationship between two variables.
- C.** the amount of variability in a data set.
- D. the difference between the largest and smallest scores in a data set.

191. When variability in a data set is large, the standard deviation will be \_\_\_\_; when variability is small, the standard deviation will be \_\_\_\_.

- A.** large; small
- B. large; large
- C. small; large
- D. small; small

192. Georgeanne calculated descriptive statistics for the age of residents in a nursing home. She reported the mean age as 75 years, with a standard deviation of 10 years. Later she found that she had made an error in her calculations. One resident's age was entered as 27 when it should have been 72. When this correction is made

- A.** the standard deviation for the data set will decrease.
- B. the standard deviation for the data set will not change.
- C. the standard deviation for the data set will increase.
- D. the correlation coefficient for the data set will become negative.

193. Carmella is in a class where the scores on the second midterm exam ranged from 75 to 85 points. Conrad is taking the same course, but in his section the scores ranged from 50 to 98 points. In this example the standard deviation in Carmella's class should be

- A. negatively correlated with the standard deviation in Conrad's class.
- B.** lower than the standard deviation in Conrad's class.
- C. higher than the standard deviation in Conrad's class.
- D. the same as the standard deviation in Conrad's class.

194. Descriptive statistics

- A. are numerical indexes of the degree of relationship between two variables.
- B.** are used to organize and summarize data.
- C. are used to interpret data and draw conclusions.
- D. indicate the probability that the observed findings are due to chance.

195. Which of the following is NOT a measure of central tendency?

- A. mode
- B. mean
- C. median
- D.** variability

196. The most frequent score in a distribution is the

- A. standard deviation.
- B. mean.
- C. median.
- D.** mode.

197. The median of the following distribution of scores 1, 2, 3, 7, 7 is

- A. 3.
- B. 4.
- C.** 5.
- D. 7.

198. The measure of central tendency that is MOST sensitive to (or most influenced by) extreme scores in a distribution is the

- A. standard deviation.
- B.** mean.
- C. median.
- D. mode.

199. How much the scores in a data set vary from each other and from the mean refers to the concept of

- A. correlation.
- B. central tendency.
- C.** variability.
- D. standard deviation.

200. The \_\_\_\_ is an index of the amount of variability in a set of data.

- A. statistical significance
- B. central tendency
- C.** standard deviation
- D. correlation coefficient

201. The correlation coefficient is a measure of

- A. central tendency.
- B. the amount of variability in a data set.
- C.** the degree of relationship between two variables.
- D. the difference between the largest and smallest scores in a data set.

202. If we were to measure the height and weight of 100 adult women, we would find that these two measures are

- A. uncorrelated.
- B. increasingly correlated.
- C. negatively correlated.
- D.** positively correlated.

203. Suppose a researcher discovered a  $+0.87$  correlation between the length of a person's toes and the number of shoes the person owns. In general, people who own the fewest number of shoes would have

- A.** small toes.
- B. large toes.
- C. medium-sized toes.
- D. either very large or very small toes.

204. Based on the information on getting more out of lectures presented in the personal application section in chapter 1, absences from classes and grade average in the class would be

- A. uncorrelated.
- B. increasingly correlated.
- C. negatively correlated.
- D.** positively correlated.

205. Dr. Macator predicts that people will act more aggressively during the heat waves of summer than they will during the cold spells of winter. This suggests that Dr. Macator believes that temperature and level of aggression are

- A. negatively correlated.
- B. independent variables.
- C. uncorrelated.
- D.** positively correlated.

206. As interest rates increase, house sales decline, indicating

- A. a direct correlation between the two variables.
- B.** a negative correlation between the two variables.
- C. a positive correlation between the two variables.
- D. no correlation between the two variables.

207. The FDA found that people who used a particular diet drug combination had more heart valve defects than people who had not taken the diet drug combination. This suggests that the use of the diet drug combination and heart valve defects are

- A. negatively correlated.
- B. independent variables.
- C.** positively correlated.
- D. interactive variables.

208. Imagine that the personality traits of openness and extroversion are positively correlated. If Andrea's score in openness is extremely low,

- A.** she would most likely score at the low end of the extroversion scale.
- B. it is impossible to predict how she is likely to score on the extroversion scale without more information.
- C. she would most likely score at the high end of the extroversion scale.
- D. she would probably score close to the median on the extroversion scale.

209. Dr. Barton has found that students who score higher than 85% on the first midterm tend to earn scores of 75% or better on the final exam, while students who score less than 60% on the first midterm often end up with a failing grade on the final exam. This suggests that

- A.** the scores on the first midterm and the final exam are positively correlated.
- B. the scores on the first midterm and the final exam are negatively correlated.
- C. students who do poorly on the first midterm give up and study less for the final.
- D. Dr. Barton should change the final so it is more fair to students who are not doing well in the course.

210. Suppose a researcher discovered a strong negative correlation between the length of people's hair and the amount of money they paid for their automobile. In general, people who paid the least amount of money for their automobile also had

- A.** the longest hair.
- B. mid-length hair.
- C. the shortest hair.
- D. either extremely long or extremely short hair.

211. Suppose that students who work more hours at their jobs tend to have lower grade point averages, and also tend to get less sleep. If we were to correlate the two variables of grade point average and number of hours of sleep, we would find that the correlation coefficient is

- A. greater than one.
- B. equal to zero.
- C. less than zero.
- D.** greater than zero, but less than one.

212. Mice who received ginkgo biloba in their diets made fewer errors in a maze running task than mice who had not received ginkgo biloba. This suggests that, in mice, the use of ginkgo biloba and errors in maze running are

- A. dependent variables.
- B.** negatively correlated.
- C. positively correlated.
- D. uncorrelated.

213. As the number of bystanders' increases, people are less likely to help someone who is in distress. This suggests that the size of a crowd and helping behavior are

- A.** negatively correlated.
- B. uncorrelated.
- C. positively correlated.
- D. dependent variables.

214. Imagine that the personality traits of conscientiousness and extroversion are negatively correlated. If Wilfred's score in conscientiousness is extremely low

- A. he would probably score close to the median on the extroversion scale.
- B.** he would most likely score at the high end of the extroversion scale.
- C. he would most likely score at the low end of the extroversion scale.
- D. it is impossible to predict how he is likely to score on the extroversion scale without more information.

215. Dr. Hackle 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 her final exam. This suggests that

- A. the scores on the final exam and the first midterm are negatively correlated.
- B. the scores on the final exam and the first midterm are positively correlated.
- C.** the scores on the final exam and the first midterm are not very highly correlated.
- D. Dr. Hackle should change the final so it is more fair to the students who are doing well in her course.

216. A correlation between two variables exists when scores on one variable

- A. are different from the scores on the second variable.
- B. cause or determine the scores on the second variable.
- C.** are related to scores on the second variable.
- D. are unrelated to scores on the second variable.

217. A numerical index of the degree of relationship between two variables is the

- A. causation coefficient.
- B.** correlation coefficient.
- C. experimental coefficient.
- D. variable coefficient.

218. If two variables have a positive correlation, you would expect that \_\_\_\_ scores on one variable are generally associated with \_\_\_\_ scores on the second variable.

- A.** low; low
- B. low; high
- C. middle; a wide variety of
- D. high; low

219. As an adult ages, his/her physical strength declines. The relationship between age and physical strength is a(n)

- A. nonexistent correlation.
- B. equal correlation.
- C. positive correlation.
- D.** negative correlation.

220. If there is a relationship between amount of coffee consumed daily and number of hours slept, such that people who drink a lot of coffee tend to sleep very little (and people who drink little coffee tend to sleep a lot), coffee consumption and hours slept would show a(n)

- A. increasing correlation.
- B. decreasing correlation.
- C. positive correlation.
- D.** negative correlation.

221. A correlation coefficient will always have a value between

- A. 0% and 100%.
- B. -10.00 and +10.00.
- C.** -1.00 and +1.00.
- D. 0 and +1.00.



222. A high correlation coefficient (either positive or negative) indicates that
- A.** there is a high level of consistency in the relationship between the two variables.
  - B. the scores on the two variables are nearly identical.
  - C. a change in one variable causes a change in the second variable.
  - D. a third factor or variable is always responsible for the relationship between the two variables.

223. Which of the following correlation coefficients indicates the strongest relationship between two variables?
- A. -1.51
  - B.** -.80
  - C. 0
  - D. +.50

224. Which of the following statements is NOT correct concerning the correlation coefficient?
- A. a value near zero indicates no relationship between the two variables
  - B.** high values indicate that the two variables have a cause and effect relationship
  - C. the type of relationship between the two variables is described by whether the value is positive or negative
  - D. the strength of the relationship between the two variables is described by the mathematical value

225. A correlation coefficient of zero describes
- A. a positive relationship between two variables.
  - B. a negative relationship between two variables.
  - C.** the lack of a relationship between two variables.
  - D. a perfect relationship between two variables.

226. Dr. Redding has found a correlation of +0.65 between snoring and weight. This indicates that
- A. overweight individuals tend to snore less than underweight individuals.
  - B. there is no relationship between weight and snoring.
  - C.** overweight individuals tend to snore more than underweight individuals.
  - D. individuals who go on a diet will most likely begin to snore.

227. Of the following, the correlation coefficient that indicates the strongest relationship between the two variables being measured is
- A. +0.65.
  - B.** -0.89.
  - C. 0.00.
  - D. +3.45.

228. Of the following, the correlation coefficient that indicates the weakest relationship between the two variables being measured is

- A. +0.95.
- B. -0.69.
- C.** +0.01.
- D. -4.50.

229. Of the following correlation coefficients, the one that would allow the most accurate predictions of one variable based on the other variable would be

- A. 0.00.
- B. +1.24.
- C. +0.65.
- D.** -0.79.

230. Of the following correlation coefficients, the one that would yield the least accurate predictions of one variable based on the other variable would be

- A.** 0.00.
- B. +0.99.
- C. +0.17.
- D. -0.49.

231. Dr. Zelke surveys 50 university students to discover the relationship between textbook price and ratings of readability. Dr. Zelke finds that for these two variables the correlation coefficient is -0.70. This indicates that

- A. more expensive books tend to receive higher readability ratings than less expensive books.
- B. there is no relationship between textbook price and ratings of readability.
- C. increasing a textbooks price will cause a decrease in its readability rating.
- D.** more expensive books tend to receive lower readability ratings than less expensive books.

232. If the correlation coefficient between amount of exposure to television violence and aggressive behavior was found to be +0.43, we could conclude that

- A. watching television violence tends to cause aggressive behavior.
- B. being an aggressive person tends to cause one to watch more violent television.
- C. people who watch the most television tend to be the least aggressive.
- D.** there is a positive relationship between these two variables.

233. Which of the following statements about correlations is incorrect?

- A.** A and B correlate +1.00; therefore, they are causally related.
- B. A and B correlate +1.00; if you know A you can predict B without error.
- C. A and B correlate -1.00; if you know A you can predict B without error.
- D. A correlation of +.90 gives better predictability than a correlation of +.60.

234. The information on getting more out of lectures presented in the Personal Application section in Chapter 1 suggests that absences from classes and grade average in the class are correlated. The best conclusion that can be drawn from this information is that

- A. higher class attendance causes higher class grades.
- B. higher class grades causes increased class attendance.
- C. high class absences causes lower class grades.
- D.** class attendance and grades are related.

235. As correlation coefficients \_\_\_\_\_, the ability to predict one variable based on knowledge of the second variable increases.

- A. become positive
- B. become negative
- C.** increase in strength
- D. decrease in strength

236. If A and B are highly correlated, which statement MOST accurately describes the relationship between A and B?

- A. the score on A causes the score on B
- B. the score on B causes the score on A
- C. both A and B are caused by a third variable
- D.** the score on A can be used to predict the score on B

237. Statistics that are used to interpret data and draw conclusions are called

- A. descriptive statistics.
- B.** inferential statistics.
- C. numerical statistics.
- D. significant statistics.

238. Inferential statistics help us determine whether \_\_\_\_\_ played a role in an experiment.

- A.** chance
- B. a dependent variable
- C. a normal distribution
- D. genetics

239. "Statistically significant" means that the results of an experiment most likely

- A. resulted from chance variations.
- B.** were not due to chance.
- C. had practical significance.
- D. were important.

240. Paulo tells you that he just completed an experiment in his botany class, and the results he obtained were statistically significant. This means that the results he obtained

- A. are important and will likely have an impact in the field of botany.
- B.** were unlikely to be a result of chance variations in his sample.
- C. will be of interest to people, even if they are not botanists.
- D. were likely to be the result of chance variations in his sample.

241. Helen conducted a study in which she measured the response time for males and females to complete a spatial task. She found that the mean response time was 1.48 minutes for males and 1.63 minutes for females. For Helen to be confident that an actual difference exists between the males and females in her study, she must

- A. calculate a correlation coefficient.
- B. redo the experiment.
- C. obtain a larger sample.
- D.** calculate an inferential statistic.

242. Inferential statistics

- A. are numerical indexes of the degree of relationship between two variables.
- B. are used to organize and summarize data.
- C.** are used to interpret data and draw conclusions.
- D. indicate the probability that the observed findings are due to chance.

243. Researchers use \_\_\_\_ to determine whether the observed difference between the two groups in the study was large enough to support the hypothesis.

- A. mathematical statistics
- B.** inferential statistics
- C. descriptive statistics
- D. correlational statistics

244. When research results are said to be statistically significant it means that

- A.** the probability that the observed findings are due to chance is very low.
- B. the observed findings are important.
- C. the observed findings are interesting.
- D. the observed findings are both important and interesting.

245. A sample is representative if

- A. only volunteer subjects are used.
- B. it is as different from the population as possible.
- C. all subjects are chosen from a single, unusual segment of the population.
- D.** its composition is similar to the composition of the population.

246. By definition, a sample

- A. is that group of people to whom the conclusion of the study will apply.
- B.** is a subset of the population who actually participate in a research study.
- C. contains less than 50 people or animals.
- D. must only include volunteers who express an interest in the study.

247. To determine whether students would like more courses scheduled in the late afternoon and evening hours, the Student Services department sends questionnaires to 50 students selected at random from the 5,000 who are registered at the campus. In this instance, the 5,000 students who are registered at the campus would be

- A.** a population.
- B. a representative sample.
- C. a biased sample.
- D. the independent variable.

248. To discover whether residents of a city are in favor of building a new sports stadium, the team's owner randomly selected and interviewed 500 of the city's 500,000 residents. In this instance, the 500 people that the owner interviewed would be

- A. a biased sample.
- B. a population.
- C. the dependent variable.
- D.** a representative sample.

249. To generalize results to a population, we must first

- A. select a biased sample from the population of interest.
- B. oversample selected subgroups in the population.
- C.** draw a representative sample from the population of interest.
- D. ensure that all the variables have been operationally defined.

250. A researcher who is conducting an opinion survey asks viewers who are watching a political debate to dial a 1-800 number and record their opinion to the "question of the day." In this case the researcher is likely to have

- A. a representative sample.
- B. a random sample.
- C.** a biased sample.
- D. a random population.