

Chapter 2 - The Research Enterprise in Psychology

1. Which goal of science is most closely associated with determining how to measure fear or identify lying?
 - a. understanding and prediction
 - b. measurement and description
 - c. application and control
 - d. testing and reporting

ANSWER: b

2. What do we call any measurable conditions, events, characteristics, or behaviours that are controlled or observed in a study?
 - a. confounds
 - b. variables
 - c. correlations
 - d. hypotheses

ANSWER: b

3. Forensic profilers use information about known serial killers to make statements about the likely next steps of a new killer and to anticipate a pattern of behaviour. Which goal of the scientific enterprise does this reflect?
 - a. application and control
 - b. measurement and description
 - c. testing and reporting
 - d. understanding and prediction

ANSWER: d

4. Which goals of science are reflected in the use of reinforcement principles to modify a child's unruly behaviour?
 - a. understanding and prediction
 - b. application and control
 - c. measurement and description
 - d. testing and reporting

ANSWER: b

5. What is a theory?
 - a. a system of interrelated ideas used to explain a set of observations
 - b. a preliminary proposal that has yet to be tested
 - c. a statement of research results that have been proven correct
 - d. a tentative statement about the relationship between two or more variables

ANSWER: a

Chapter 2 - The Research Enterprise in Psychology

6. There are multiple goals in science, and researchers move between goals at various points in their research. If a researcher has a lot of data about the measurement of fear reactions and uses those data to generate a theory about fear, how have the researcher's goals changed?
- from application to control
 - from control to description
 - from description to understanding
 - from understanding to application

ANSWER: c

7. If Dr. Smith has tested a hypothesis and the findings have failed to support the hypothesis, what influence will this have on Dr. Smith's theory?
- It will support the theory because hypotheses attempt to disprove theories.
 - It will have little effect on the theory because hypotheses are merely predictions based on the theory.
 - It will require that the theory be reconsidered because hypotheses allow the theory to be tested.
 - It will cause the theory to be rejected because the hypothesis, and therefore the theory, is unsupported.

ANSWER: c

8. Which of the following patterns is typical of theory construction?
- a gradual iterative process that is always subject to revision
 - a process that results in concrete findings that are accepted by other scientists
 - a standard step-like process that quickly moves toward the truth
 - a circular process that is self-fulfilling

ANSWER: a

9. Dr. Marqueta predicts that people who have received bad news will seek out other people because "misery loves company." Which of the following terms characterizes Dr. Marqueta's prediction about the behaviour of people?
- theory
 - hypothesis
 - analysis
 - application

ANSWER: b

Chapter 2 - The Research Enterprise in Psychology

10. What is a hypothesis?
- a conclusion drawn from an experiment
 - a system by which an experiment is designed
 - a system of interrelated ideas used to explain a set of observations
 - a tentative statement about the relationship between two or more variables

ANSWER: d

11. Which of the following is a testable hypothesis?
- Fear is defined as an emotional reaction to a change in stimuli.
 - Fear is an adaptive response that keeps us safe.
 - Fearful children are less likely to be injured when playing at school.
 - There are likely differences in how people experience fear.

ANSWER: c

12. Dr. Licciardi predicts that if people are observed while they perform a complex task, they will make more errors. Which of the following terms is Dr. Licciardi's prediction an example of?
- theory
 - inferential statistics
 - hypothesis
 - operational definition

ANSWER: c

13. Dr. Malm predicts that if teachers ignore students who act up in class, fewer students will act up in class. What is the scientific term for Dr. Malm's prediction?
- operational definition
 - inferential statistics
 - hypothesis
 - theory

ANSWER: c

14. A researcher is measuring the heart rate of subjects in a study about anxiety, because heart rate changes in a predictable way when people are anxious. In this study, what is heart rate?
- negatively correlated with anxiety
 - independent variable
 - confounded variable
 - operational definition of anxiety

ANSWER: d

Chapter 2 - The Research Enterprise in Psychology

15. Several researchers are working on different experiments that are designed to test whether a person's confidence can be changed over time. They want to be able to compare their results when they are done. They agree that they will all use the same test in order to measure confidence. Which of the following have the researchers done?
- They agreed to use the same independent variable.
 - They agreed to use the same hypothesis.
 - They agreed on an operational definition of confidence.
 - They agreed to remove a confounding variable.

ANSWER: c

16. Which of the following is an operational definition of aggression?
- Aggression is an emotional response rather than a cognitive response.
 - Aggression is caused by fear.
 - Aggression will lead victims to become more aggressive.
 - Aggression is measured by the number of times one person hits another person.

ANSWER: d

17. Dr. Dieringer wants to study attachment patterns in single-parent families. She plans to define the strength of attachment as the time it takes for the parent to respond when the infant starts to cry. Why is this definition important?
- It allows others to understand exactly what Dr. Dieringer means by "attachment."
 - It allows Dr. Dieringer to generate a scientific hypothesis.
 - It prevents research assistants from violating ethical guidelines for psychological research.
 - It requires a double-blind research design.

ANSWER: a

18. Terry has a theory and has formulated a testable hypothesis. What is the next step that Terry needs to take in the scientific method?
- choosing the statistical procedures
 - selecting the research methods
 - refining the theory based on the hypothesis
 - collecting the data

ANSWER: b

Chapter 2 - The Research Enterprise in Psychology

19. Dr. Hessels is examining how different people respond to frightening events. She will have participants walk through a haunted house at a local amusement park, and each participant will be outfitted with a heart monitor. She will use the changes in heart rate as a measure of stress. What are two ways that such changes in heart rate can be described?
- an operational definition and an independent variable
 - confounded variable and a physiological recording
 - a physiological recording and an independent variable
 - an operational definition and a dependent variable

ANSWER: d

20. In the Featured Study, some individuals crossed a high, fear-arousing bridge, while others crossed a low, non-frightening bridge. In this study, what do we call the type of bridge?
- naturalistic observation
 - dependent variable
 - operational definition
 - independent variable

ANSWER: d

21. In the Featured Study, individuals who had just recently crossed a bridge were met by either a male or a female confederate of the researcher. What do you call the type of confederate in this study?
- confounding variable
 - independent variable
 - extraneous variable
 - dependent variable

ANSWER: b

22. The Thematic Apperception Test (TAT) is a projective test that contains ambiguous stimuli that are to be interpreted by the participant. In the Featured Study, participants crossed a bridge and then completed the TAT. How did the researchers use participants' responses to the TAT in this study?
- as a dependent variable
 - as a confounding variable
 - as an extraneous variable
 - as an independent variable

ANSWER: a

Chapter 2 - The Research Enterprise in Psychology

23. Which of the following activities would be particularly useful for making someone more attractive to a potential date, according to the results of the Featured Study on the effects of arousal on attraction?
- a soothing evening of chamomile tea and soft jazz music
 - doing something that you already enjoy to reduce anxiety
 - an athletic event of moderate intensity
 - a trip to an amusement park, followed by a horror movie

ANSWER: d

24. Amanda tells you about her date with Brett the night before. They went to the local amusement park, where they rode roller-coasters, attempted a climbing wall, and went into the House of Horrors. At first, Amanda wasn't that interested in Brett, but by the end of the night she found herself very attracted to him. What insights could you provide, given the results of the Featured Study on the effects of arousal on attraction?
- She must really be in love, because people who experience fear-inducing stimuli often end up showing fear or revulsion to people nearby.
 - She must have feelings for Brett, because she experienced arousal even while doing scary things.
 - She may have interpreted her physical arousal as attraction, because the sensations are similar.
 - She doesn't really have any interest in Brett, but her emotions were reversed by fear.

ANSWER: c

25. During which stage of the scientific method would a researcher provide data to the general public?
- analyzing the data
 - drawing conclusions
 - reporting the findings
 - debriefing participants

ANSWER: c

26. What is a scientific journal?
- a personal diary kept by a scientist
 - a detailed record of the daily procedures followed in conducting a study
 - a periodical that publishes technical and scholarly articles
 - a collection of biographies of famous scientists

ANSWER: c

Chapter 2 - The Research Enterprise in Psychology

27. A group of students are administered a series of written questions designed to assess their attitudes, opinions, and behaviour related to studying. What is this method called?
- a. a psychological test
 - b. a questionnaire
 - c. a paper-based interview
 - d. a direct observation

ANSWER: b

28. A psychologist monitors changes in the subject's heart rate as the subject watches a violent movie. What is this data-collection technique called?
- a. archival records
 - b. direct observation
 - c. psychological testing
 - d. physiological recording

ANSWER: d

29. Ted uses a personality test as one of the dependent measures in his study. What data-collection technique is Ted using?
- a. direct observation
 - b. survey
 - c. case study
 - d. psychological test

ANSWER: d

30. Jackson is working with a company to help it develop more effective training programs for its employees. He has spent a great deal of time reviewing all the documentation the company has about previous training opportunities it has provided for its employees. What research technique is Jackson using?
- a. meta-analysis
 - b. direct observation
 - c. psychological testing
 - d. archival research

ANSWER: d

Chapter 2 - The Research Enterprise in Psychology

31. Of the following pairs, which pair contains two data-collection techniques that are most likely to involve direct contact between the researcher and the research participant?
- a. direct observation and interviews
 - b. questionnaires and interviews
 - c. archival research and questionnaires
 - d. archival research and psychological testing

ANSWER: a

32. Ling answered a series of written questions that asked about her attitudes and opinions on a number of current issues. What is this method of data collection called?
- a. a questionnaire
 - b. archival research
 - c. a standardized psychological test
 - d. direct observation

ANSWER: a

33. Which of the following is most likely to lead to the discarding of research results?
- a. creating operational definitions
 - b. data analysis
 - c. hypothesis generation
 - d. publishing in a journal

ANSWER: d

34. Which of the following is a general term for the manner in which a researcher collects empirical data?
- a. statistical procedure
 - b. hypothesis testing
 - c. research method
 - d. archival recording

ANSWER: c

Chapter 2 - The Research Enterprise in Psychology

35. What does a researcher do when conducting an experiment?
- in-depth investigation of an individual subject through detailed documentation
 - observation of behaviour as it occurs in its natural environment
 - systematic observation or measurement of two variables to see whether there is an association between them
 - manipulation of a variable under carefully controlled conditions and observation of whether there are changes in a second variable as a result

ANSWER: d

36. Which approach is defined by manipulating a variable under carefully controlled conditions and observing the changes in a second variable?
- experimental approach
 - survey approach
 - testing approach
 - correlational approach

ANSWER: a

37. In an experiment, what do you call the variable that is controlled or manipulated by the researcher?
- stimulus variable
 - dependent variable
 - control variable
 - independent variable

ANSWER: d

38. What is an independent variable in an experiment?
- a variable that provides an alternative explanation for the results of the experiment
 - a variable that is held constant across experimental conditions
 - a variable that the experimenter believes will change in value because of systematic correlations that exist in the experiment
 - a variable deliberately manipulated by the experimenter

ANSWER: d

Chapter 2 - The Research Enterprise in Psychology

39. A group of researchers investigates the effects of a vitamin supplement on animal 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. What is the independent variable in this study?
- the number of trials it takes to run the maze without making any errors
 - the trials in which the supplement is used
 - the presence or absence of the supplement in the animal's diet
 - the two different mazes used

ANSWER: c

40. A group of researchers wanted to determine if people will eat more food in a room that is decorated with red than in a room that is decorated with 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. What is the independent variable in this study?
- the colour of the decorations in the room
 - the amount of food consumed in the red room
 - the amount of food consumed in the blue room
 - the participants in each group

ANSWER: a

41. 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 that had the conversations playing. In this study, what would you call the type of room (silent versus conversation)?
- placebo
 - independent variable
 - dependent variable
 - extraneous variable

ANSWER: b

Chapter 2 - The Research Enterprise in Psychology

42. 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, what would you call the type of beverage (caffeinated or decaffeinated)?
- a. extraneous variable
 - b. dependent variable
 - c. confounding variable
 - d. independent variable

ANSWER: d

43. What is a dependent variable?
- a. a variable that changes value because of the systematic manipulation in an experiment
 - b. a variable deliberately manipulated by an experimenter
 - c. a variable that the experimenter is depending on to cause something to happen in an experiment
 - d. a variable held constant across experimental conditions

ANSWER: a

44. Researchers tested the physical coordination skills of 25-year-old males who had been sleep deprived for 24, 36, or 48 hours. In this study, what is the dependent variable?
- a. the length of time the participants had been sleep deprived
 - b. the physical coordination of the control group
 - c. the male-only group of participants
 - d. the physical coordination skills of participants

ANSWER: d

45. 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, what is the dependent variable?
- a. the parking lot
 - b. the number of participants who park in the spot they are directed to
 - c. the type of clothing worn by the person giving the directions
 - d. the directions given

ANSWER: b

Chapter 2 - The Research Enterprise in Psychology

46. A group of researchers conducts a study to determine if a child'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, what do you call the length of time it takes to complete the puzzle?
- extraneous variable
 - control variable
 - dependent variable
 - independent variable

ANSWER: c

47. 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, what do you call the number of errors made?
- extraneous variable
 - dependent variable
 - independent variable
 - control variable

ANSWER: b

48. If we view an experiment as an attempt to establish a cause–effect relationship, which of the following can be viewed as the “cause” in an experiment?
- the independent variable
 - the dependent variable
 - the hypothesis
 - the theory

ANSWER: a

49. A researcher found that clients who were randomly assigned to same-gender groups participated more in group therapy sessions than clients who were randomly assigned to mixed-gender groups. In this experiment, what is the dependent variable?
- whether or not the group was mixed-gender
 - how much the clients' mental health improved
 - the clients' attitudes toward group therapy
 - the amount of participation in the group therapy sessions

ANSWER: d

Chapter 2 - The Research Enterprise in Psychology

50. Nula is conducting a study in which one group is exposed to loud music while completing a writing assignment and the other group has quiet conditions. Further, Nula examines the effect of gender within these groups. Therefore, she is examining the effects of both noise and gender on participants' performance on a writing task. Which of the following reflects the type of variables present in this study?
- one independent variable and two dependent variables
 - one control variable and two independent variables
 - one independent variable, one control variable, and one dependent variable
 - two independent variables and one dependent variable

ANSWER: d

51. What differs between an experimental group and a control group?
- The characteristics of the participants.
 - Only the experimental group is measured for the dependent variable.
 - Nothing except the experience of the independent variable.
 - Only the control group experiences the independent variable.

ANSWER: c

52. In an experiment designed to test memory processes, one group was asked to group the items on a list into categories while trying to memorize them. A second group was told to rhyme each of the words on the list. In this study, which group is the control group?
- the group that was told to categorize
 - the group in which the participants remember the most items from the list
 - the group that was told to rhyme
 - a third group that was not given special instructions

ANSWER: d

53. 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, which group is the control group?
- the group that showed no evidence of an improvement in their memory
 - the group that received the actual drug
 - the group that received the placebo
 - no control group in this study

ANSWER: c

Chapter 2 - The Research Enterprise in Psychology

54. Phong and Mikaela both take part in a research study that is investigating the effects of sleep deprivation on reaction time. Phong is kept awake for 24 hours straight, while Mikaela follows her normal sleep routine. Which group is Phong in?
- the independent variable group
 - the control group
 - the dependent variable group
 - the experimental group

ANSWER: d

55. What is the purpose of the control group?
- to isolate the effect of the independent variable on the dependent variable
 - to correlate the dependent variable with the independent variables
 - to make statistical significance more likely
 - to make the experiment more complex

ANSWER: a

56. 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 standard rat food. What types of groups are represented in this study?
- The high-protein group is an experimental group; the standard food group is a control group.
 - Both groups are experimental groups.
 - Both groups are control groups.
 - The high-protein group is a control group; the standard food group is an experimental group.

ANSWER: a

57. 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. Which of the following can you conclude from this study?
- TV violence causes violent behaviour in children.
 - TV violence is correlated with violent behaviour in children.
 - You can't conclude anything until you know the rates of violence displayed by children.
 - You can't conclude anything because you have nothing to compare to the aggression after the TV viewing.

ANSWER: b

Chapter 2 - The Research Enterprise in Psychology

58. A group of researchers wanted to determine whether children would behave more aggressively after watching television programming. One third of the children in the study watched a violent television show and one third of the children watched a non-violent television program. If the remaining children are in a control group, what should happen to them?
- Half should watch a violent show and half should watch a non-violent show.
 - They should listen to the radio.
 - They should be the group monitored for violent behaviour.
 - They should not watch a television show.

ANSWER: d

59. Jack believes that patrons in his bar will be more likely to leave a tip if the tip jar already has some money in it. 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 Jack's experiment, which is the control group?
- the patrons who see an empty tip jar
 - all the patrons who leave the bar without tipping
 - the patrons who see a tip jar that contains at least \$5.00
 - all the patrons who leave a tip when they leave the bar

ANSWER: a

60. Dr. Prutherow believes that people who are under stress will develop more colds than people who are not under stress. When he randomly selected ten participants and exposed them to high levels of stress, he found that nine of the participants developed colds. What critical piece is missing from Dr. Prutherow's study?
- a dependent variable
 - a testable hypothesis
 - a group without stress
 - a group without colds

ANSWER: c

61. What is an extraneous variable?
- the same thing as a dependent variable
 - a variable, other than the independent variable, that may influence the dependent variable
 - a variable that is completely irrelevant to both the independent and dependent variables
 - a variable that affects the control group but not the experimental group

ANSWER: b

Chapter 2 - The Research Enterprise in Psychology

62. Mandy thinks that people who work hard will always succeed. She grew up in a very wealthy neighbourhood and noticed that all of her friends who worked hard became successful. In this example, which of the following is true of wealth and hard work?
- They are correlated.
 - They are confounded.
 - They are independent.
 - They are dependent.

ANSWER: b

63. A researcher is studying two groups of children. One group includes children who are 10 years old and the other group includes children who are 5 years old. Which of the following variables would be confounded with age in this study?
- gender
 - height
 - aggression
 - income

ANSWER: b

64. 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. What is the problem with this experimental design?
- The age of the participants is confounded with the independent variable.
 - There are two control groups and no experimental group.
 - There is no dependent variable in the experiment.
 - The time allowed for the decision is confounded with the independent variable.

ANSWER: a

65. Which of the following is most important for reducing the likelihood of extraneous variables?
- experimental methods
 - correlational methods
 - random assignment
 - random sampling

ANSWER: c

Chapter 2 - The Research Enterprise in Psychology

66. What is random assignment?

- a. Subjects are free to choose which group or condition they would like to be in.
- b. All variables have an equal chance of being assigned to the experimental condition.
- c. All people have an equal likelihood of being selected from the study.
- d. All subjects have an equal chance of being assigned to any of the groups or conditions.

ANSWER: d

67. 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 whether they would like to use the new technique or the standard technique. What procedure is illustrated in this example?

- a. a double-blind research design
- b. informed consent in research
- c. the use of non-random assignment
- d. naturalistic observation

ANSWER: c

68. Braeden received a poor performance evaluation in his job last year. Since then, Braeden has started working through his lunch hour, taken on four special projects, and enrolled in night classes to upgrade his computer skills. Why will it be hard for Braeden to figure out the cause if he receives a better evaluation at his next performance?

- a. He failed to use a double-blind procedure to test his hypothesis.
- b. None of the actions he took are likely to be related to his overall job performance.
- c. The three actions he took are confounded with each other.
- d. He didn't formulate a research hypothesis before implementing the changes.

ANSWER: c

69. In a study of the effect of fatigue on task performance, participants were asked to complete a series of puzzles. One day, all participants completed puzzles after 24 hours without sleep. On another day, the same participants completed puzzles after sleeping for at least eight hours. What research design is used in this study?

- a. between-subjects design
- b. within-subjects design
- c. single-blind design
- d. interaction design

ANSWER: c

Chapter 2 - The Research Enterprise in Psychology

70. Dr. Shingwauk designed an experiment in which participants listened to a persuasive speech delivered either by a very tall person or a person of average height. In addition, the speeches were delivered by people wearing either business clothes or casual clothes. Dr. Shingwauk asked listeners to fill out a survey about impressions of the speaker's credibility. In this study, what is Dr. Shingwauk looking to determine?
- Does a double-blind procedure lead to greater credibility of speakers, independent of the effects of appearance?
 - Do height and clothing style interact to influence judgments of credibility?
 - Does persuasion interact with any other factors?
 - Does persuasion influence our perception of height and clothing?

ANSWER: b

71. What does it mean when there is an interaction between two variables?
- The measurement of the dependent variable depends on the effect of the independent variable.
 - The measurement of one dependent variable gets added to the measurement of another.
 - The effects of one independent variable get added to the effects of another.
 - The effects of one independent variable depend on the effects of another.

ANSWER: d

72. What is the main advantage associated with the experimental method?
- its precise control
 - its ability to be generalized to multiple contexts
 - its ability to duplicate real life in the laboratory
 - its appeal to participants

ANSWER: a

73. Which research method gives researchers the ability to infer a cause-and-effect relationship?
- correlational
 - experimental
 - case history
 - empirical

ANSWER: b

Chapter 2 - The Research Enterprise in Psychology

74. Which of the following is a disadvantage of the experimental method?

- a. Experiments often can't be done for practical or ethical reasons.
- b. Only one variable can be studied at a time.
- c. Length of time necessary to complete the study.
- d. Inability to generate cause-and-effect conclusions.

ANSWER: a

75. Shelley is a researcher who studies disabilities as a result of head injuries. She has chosen to use non-experimental methods because of some of the limitations of experiments. Which of the following limits would most likely cause problems for Shelley's research?

- a. It is not ethical to conduct experiments with people with disabilities.
- b. People cannot be randomly assigned to a group that experiences a head injury.
- c. Disability cannot be operationally defined.
- d. Experiments cannot be used to study interaction effects.

ANSWER: a

76. What do researchers do when conducting descriptive or correlational research?

- a. They simultaneously manipulate two or more independent variables.
- b. They systematically describe patterns of behaviour and discover relationships among variables.
- c. They manipulate a variable under carefully controlled conditions and observe whether there are changes in a second variable as a result.
- d. They expose subjects to two closely related treatment conditions.

ANSWER: b

77. Donnie wants to know whether attractive waiters make more tips. He has a group of people rate the attractiveness of five different waiters, and he gets the waiters to tell him how much money they make in tips every night for a month. What type of research design has Donnie used?

- a. quasi-experimental design
- b. correlational design
- c. experimental design
- d. case study design

ANSWER: b

Chapter 2 - The Research Enterprise in Psychology

78. What do naturalistic observation, case studies, and surveys all have in common?

- a. They can show causal relationships.
- b. The results obtained cannot be analyzed statistically.
- c. They do not directly observe behaviour.
- d. They do not manipulate the variables under study.

ANSWER: d

79. A researcher goes to a playground for an hour each day for two weeks and makes notes when children are playing together. He records the number of times that a girl and a boy are playing together, when boys play only with other boys, and when girls play only with other girls. Which research method is the researcher using?

- a. experiment
- b. naturalistic observation
- c. correlation
- d. case study

ANSWER: b

80. What do we call recording all instances of an event for a particular time period (such as how many times an older brother strikes his younger brother during a given week) without the subjects' awareness?

- a. naturalistic observation
- b. compiling a case study
- c. creating an archive
- d. correlational research

ANSWER: a

81. 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 sex. What type of research method are you using?

- a. naturalistic observation
- b. case study
- c. correlation
- d. casual observation

ANSWER: a

Chapter 2 - The Research Enterprise in Psychology

82. 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. What type of research is being conducted in this example?

- a. correlational research
- b. case study
- c. unethical research
- d. naturalistic observation

ANSWER: d

83. 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. What sort of research is being conducted in this example?

- a. naturalistic observation
- b. correlational research
- c. reactivity
- d. case study

ANSWER: a

84. Jolyn believed that there were gender differences in driving habits. To test this hypothesis, 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. What sort of research is Jolyn conducting?

- a. psychological testing
- b. naturalistic observation
- c. experiment with two dependent variables
- d. case study research

ANSWER: b

85. What is a distinct advantage of naturalistic observation?

- a. It allows behaviour to be studied in realistic settings.
- b. It allows for random sampling.
- c. It reduces reactivity among participants.
- d. There is a wider range of statistical procedures that can be used.

ANSWER: a

Chapter 2 - The Research Enterprise in Psychology

86. Which of the following is a major problem with naturalistic observation?
- It works well with animals but is virtually useless for studying human behaviour.
 - Researchers have a difficult time determining whether a setting is truly natural.
 - It is limited by the constraints of random sampling and random assignment.
 - It is difficult to observe behaviour without having an influence on that behaviour.

ANSWER: d

87. Stephanie is observing a group of adolescents at the mall and documenting their rate of swearing. The group keeps looking over at Stephanie and pointing at her, and they get louder and more obnoxious the longer she observes them. Which of the following terms describes Stephanie's effect on the group?
- demand characteristics
 - disrupting
 - reactivity
 - confounding

ANSWER: c

88. Which of the following techniques is most likely to prove useful in determining why one particular child is afraid to go to school?
- descriptive study
 - case study
 - naturalistic observation
 - experiment

ANSWER: b

89. Dr. Kincaid was interested in the topic of musical genius. In the initial part of the investigation, Dr. Kincaid carefully observed and compiled detailed files on three individuals who were musical geniuses. What sort of research is Dr. Kincaid conducting?
- correlational
 - survey
 - naturalistic observation
 - case study

ANSWER: d

Chapter 2 - The Research Enterprise in Psychology

90. In which of the following would there be the greatest risk of effects of subjectivity and selective attention?
- conducting a placebo-control trial
 - compiling a case study
 - running experimental studies
 - conducting surveys

ANSWER: b

91. 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. What sort of research did NASA conduct in this situation?
- experimental research
 - survey research
 - case study research
 - naturalistic observation

ANSWER: c

92. 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. What would be the best research option for your friend to use?
- case study
 - survey
 - archival research
 - double-blind observational study

ANSWER: b

93. 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. Which type of research will Estavan have taken part in if he completes the questionnaire and returns it?
- archival research
 - naturalistic observation
 - survey method
 - case study approach

ANSWER: c

Chapter 2 - The Research Enterprise in Psychology

94. Which of the following types of research allows psychologists to study the widest range of phenomena?
- descriptive research
 - introspective research
 - developmental research
 - experimental research

ANSWER: a

95. Trevor plans to study the relationship between individuals' responses to highly stressful situations and their overall health. He decides he must use correlational research, rather than experimental research, to investigate this problem. What is the most likely reason that Trevor chose a correlational method?
- Correlational studies have higher internal validity than experiments.
 - Correlational research can be used to investigate factors that would be unethical to manipulate in an experimental study.
 - Correlational studies tend to be more accurate than experiments.
 - Correlational research can be used to study direct relationships, but not inverse or indirect relationships.

ANSWER: b

96. Maria plans to study the relationship between self-esteem and being raised in a single-parent or a two-parent family. She decides she must use correlational research, rather than experimental research, to investigate this problem. What is the likely reason that Maria chose a correlational method?
- Correlational studies can be used to study either positive or negative relationships, whereas experiments can be used to study only positive relationships.
 - Correlational studies have higher internal validity than experiments.
 - Correlational methods tend to be more accurate than experiments.
 - Correlational studies can be used to investigate factors that would be impossible to manipulate in an experimental study.

ANSWER: d

97. What is perhaps the greatest disadvantage or limitation associated with descriptive research methods?
- the inability to identify cause-and-effect relationships
 - the fact that these methods usually focus attention too narrowly on a single variable
 - the restriction to very small samples
 - an insensitivity to ethical concerns

ANSWER: a

Chapter 2 - The Research Enterprise in Psychology

98. Eric just completed a correlational study, and his results reveal that people who take more showers have higher income. Eric wonders whether certain types of jobs might both pay more and cause people to get dirtier. Which of the following terms reflects Eric's interpretation of his results?
- a. reactivity
 - b. third variable problem
 - c. sampling bias
 - d. interaction effects

ANSWER: b

99. Your professor handed out a list of all the grades for all four exams in your class. In which of the following situations would you use descriptive statistics?
- a. You want to know your average in this course.
 - b. You want to know whether your score on the most recent exams is significantly higher than your previous exams.
 - c. You want to know whether your exam score is significantly higher than your friend's.
 - d. You want to know whether your grade in this course is higher than your grade in another course.

ANSWER: a

100. What type of statistics would you use if you wanted to summarize and organize your data?
- a. computational
 - b. mathematical
 - c. descriptive
 - d. inferential

ANSWER: c

101. What is the score that falls exactly in the centre of a distribution of scores, such that half the scores fall below that score and half the scores fall above it?
- a. median
 - b. mean
 - c. standard deviation
 - d. mode

ANSWER: a

Chapter 2 - The Research Enterprise in Psychology

102. What is the median of the following set of numbers?: 1, 2, 2, 3, 4, 4, 4

- a. 1
- b. 2
- c. 3
- d. 4

ANSWER: c

103. Kaley added up the amount of money she made on four paycheques and then divided that number by four. Which of the following measures of central tendency did Kaley use?

- a. mode
- b. mean
- c. median
- d. midpoint

ANSWER: b

104. What does the mode of a group of scores represent?

- a. its association with another group of scores
- b. the midpoint
- c. its central tendency
- d. its variability

ANSWER: c

105. Tian tells you that 17 out of the 30 students enrolled in his English class scored exactly 62 points on the last exam. Which of the following states the same concept?

- a. The standard deviation for that exam was 62 points.
- b. The mode for that exam was 62 points.
- c. The mean for that exam was 62 points.
- d. The median for that exam was 62 points.

ANSWER: b

Chapter 2 - The Research Enterprise in Psychology

106. 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. What will happen to the mean and median once the score is entered correctly?
- The mean for the exam will change, but the median will stay the same.
 - Neither the mean nor the median for the exam will be affected.
 - The median for the exam will change, but the mean will stay the same.
 - Both the mean and the median for the exam will change.

ANSWER: a

107. 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, what can you conclude about Carla's score?
- It is the mean for her class.
 - It is the median for her class.
 - It is the standardized score for her class.
 - It is the mode for her class.

ANSWER: b

108. In Margaritte's sociology discussion group, four of the five students are between the ages of 19 and 23; the fifth student is 54 years old. Which statistic should Margaritte use if she wants to report the statistic that best represents the typical age for her discussion group?
- The mean or the median because these numbers are typically the same.
 - The mean or the standard deviation so that additional statistics can be calculated.
 - The median or the mode because these numbers will best represent the typical class member.
 - The mean or the mode because these numbers are not affected by extreme scores in the distribution.

ANSWER: c

109. Which of the following can be said about a distribution of scores where the mean is lower than the median and mode?
- The median and mode must be the same.
 - The standard deviation is high.
 - The distribution is positively skewed.
 - The distribution is negatively skewed.

ANSWER: d

Chapter 2 - The Research Enterprise in Psychology

110. What does the standard deviation tell you about the variability in a data set?
- When variability is high, the standard deviation is small.
 - The standard deviation does not reflect the variability in the data set.
 - A large standard deviation means that there is a great degree of variability in the data set.
 - As variability increases in a data set, the standard deviation becomes more variable as well.

ANSWER: c

111. Dr. Greyeagle 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. What will happen to the standard deviation when this correction is made?
- It will decrease.
 - It will increase.
 - It will not change.
 - It will increase, but only if the mean remains the same.

ANSWER: a

112. 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, what can be said about the standard deviations in the two classes?
- The standard deviation will be lower in Carmella's class.
 - The standard deviations will be negatively correlated.
 - The standard deviation will be less predictable in Carmella's class.
 - The standard deviation will be higher in Carmella's class.

ANSWER: a

113. If the distribution of test scores for a midterm is normal, approximately what percentage of the class should have a score that falls within two standard deviations of the mean?
- 34 percent
 - 68 percent
 - 95 percent
 - 99 percent

ANSWER: c

Chapter 2 - The Research Enterprise in Psychology

114. Terry's midterm test score falls at the 10th percentile. How many classmates scored the same or lower than Terry?
- a. 0 percent
 - b. 10 percent
 - c. 90 percent
 - d. 100 percent

ANSWER: b

115. If you wanted to predict test scores based on amount of time spent studying, which statistic would you need to use?
- a. variance
 - b. correlation coefficient
 - c. standard deviation
 - d. central tendency

ANSWER: b

116. What does the correlation coefficient measure?
- a. the central tendency
 - b. the degree of relationship between two variables
 - c. the difference between the largest and smallest scores in a data set
 - d. the amount of variability in a data set

ANSWER: b

117. What would we likely find if we were to measure the height and weight of 100 adult women and calculate a correlation coefficient on the data??
- a. Height and weight are negatively correlated.
 - b. Height and weight are increasingly correlated.
 - c. Height and weight are positively correlated.
 - d. Height and weight are uncorrelated.

ANSWER: c

Chapter 2 - The Research Enterprise in Psychology

118. 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, who would you predict to own the most shoes?
- people with large toes
 - people with medium-sized toes
 - people with either very large or very small toes
 - people with small toes

ANSWER: a

119. Dr. Macator predicts that people will act more aggressively during the heat waves of summer than they will during the cold spells of winter. Which of the following reflects Dr. Macator's prediction?
- Temperature and aggression are uncorrelated.
 - Temperature and aggression are negatively correlated.
 - Temperature and aggression are positively correlated.
 - Temperature is independently correlated with aggression.

ANSWER: c

120. The Ministry of Health found that people who used diet drugs had more heart valve defects than people who had not taken any diet drug. Which of the following reflects this finding?
- Heart valve defects and diet drug use are independent of one another.
 - Heart valve defects are positively correlated with the use of diet drugs.
 - Heart valve defects and use of diet drugs are negatively correlated.
 - Heart valve defects and diet drug use are interactive variables, with no correlational relationship.

ANSWER: b

121. Imagine that the personality traits of openness and extraversion are positively correlated. Andrea just took two tests that measure openness and extraversion, respectively. If Andrea's score in openness is extremely low, what would you predict about her extraversion score?
- She would most likely score at the low end of the extraversion scale.
 - It is impossible to predict how she is likely to score on the extraversion scale without more information.
 - Her extraversion score would be corrected based on her openness score.
 - She would most likely score around the mean of the extraversion scale.

ANSWER: a

Chapter 2 - The Research Enterprise in Psychology

122. Dr. Vishnu has found that students who score higher than 85 percent on the first midterm tend to earn scores of 75 percent or better on the final exam, while students who score less than 60 percent on the first midterm often end up with a failing grade on the final exam. What can be said about the relationship between scores?
- Students who do poorly on the first midterm do not improve.
 - Students who do poorly on the first midterm give up and study less for the final.
 - Scores on the first midterm and the final exam are positively correlated.
 - Scores on the first midterm and the final exam are negatively correlated.

ANSWER: c

123. 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, what could you predict about people's hair length if you know that they paid very little for their cars?
- They have very long hair.
 - They have either very long or very short hair.
 - They have mid-length hair.
 - They have very short hair.

ANSWER: a

124. Mice who received caffeine in their diets made fewer errors in a maze-running task than mice who had not received caffeine. What does this suggest about the use of caffeine and maze-running errors among mice?
- They are positively correlated.
 - They are weakly correlated.
 - They are uncorrelated.
 - They are negatively correlated.

ANSWER: d

125. As the size of a crowd increases, people are less likely to help someone who is in distress. What is the relationship between the number of people in a crowd and the likelihood of helping?
- They are negatively correlated.
 - They are indirectly correlated.
 - They are uncorrelated.
 - They are positively correlated.

ANSWER: a

Chapter 2 - The Research Enterprise in Psychology

126. Imagine that the personality traits of conscientiousness and extraversion are negatively correlated. Vladimir's scores fit the typical pattern. If Vladimir's score in conscientiousness is extremely low, how would he score on extraversion?
- He would probably score close to the median on the extraversion scale.
 - He would most likely score at the low end of the extraversion scale.
 - It is impossible to predict how he is likely to score on the extraversion scale without more information.
 - He would most likely score at the high end of the extraversion scale.

ANSWER: d

127. Suppose that students who work fewer hours at their jobs tend to have higher grade point averages and also tend to get more sleep. What would the correlation coefficient be if we were to correlate the two variables of grade point average and number of hours of sleep?
- greater than 1, but less than 2
 - equal to 0
 - less than zero, but greater than -1
 - greater than 0, but less than 1

ANSWER: d

128. 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 percent and 80 percent on her final exam. Which of the following values would best represent the correlation between the grades?
- near 1
 - near -1
 - near 0
 - near 2

ANSWER: c

129. What is represented by a correlation coefficient of zero?
- absence of a linear correlation between two variables
 - a negative correlation between two variables
 - a perfect linear correlation between two variables
 - a positive correlation between two variables

ANSWER: a

Chapter 2 - The Research Enterprise in Psychology

130. Of the following, which correlation coefficient indicates the strongest relationship between the two variables being measured?

- a. +3.45
- b. +0.65
- c. 0.00
- d. -0.89

ANSWER: d

131. Of the following, which correlation coefficient indicates the weakest relationship between the two variables being measured?

- a. +0.95
- b. +0.01
- c. -0.69
- d. -4.50

ANSWER: b

132. Of the following correlation coefficients, which one would allow the most accurate predictions of one variable based on the other variable?

- a. +1.23
- b. +0.65
- c. 0.00
- d. -0.79

ANSWER: d

133. Of the following correlation coefficients, which one would yield the LEAST accurate predictions of one variable based on the other variable?

- a. +0.99
- b. +0.17
- c. 0.00
- d. -0.49

ANSWER: c

Chapter 2 - The Research Enterprise in Psychology

134. 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 . What does this indicate?
- More expensive books tend to receive lower readability ratings than less expensive books.
 - Increasing the price of a book will lead people to think that it is more readable.
 - Less expensive books tend to receive lower readability ratings than more expensive books.
 - There is no relationship between book price and ratings of readability.

ANSWER: a

135. What could we conclude if the correlation coefficient between amount of exposure to television violence and aggressive behaviour was found to be $+0.43$?
- Watching television violence tends to cause aggressive behaviour.
 - People who watch the most television violence tend to be the most aggressive.
 - Television violence is uncorrelated with aggressive behaviour.
 - People who watch the most television violence tend to be the least aggressive.

ANSWER: b

136. Which of the following statements about correlations is NOT correct?
- A and B correlate $+1.00$; therefore, they are causally related.
 - A and B correlate $+1.00$; if you know A, you can predict B without error.
 - A and B correlate -1.00 ; if you know A, you can predict B without error.
 - A correlation of $+0.90$ gives better predictability than a correlation of $+0.60$.

ANSWER: a

137. Which of the following situations is an example of using inferential statistics?
- A public poll reports that 75 percent of the population supports picnics.
 - The government reports that it must implement a 5 percent cut in spending.
 - The national bank reports that consumer debt is significantly higher than last year at this time.
 - A teacher indicates that most students scored between 55 and 65 on the test.

ANSWER: c

Chapter 2 - The Research Enterprise in Psychology

138. You've been keeping records of your car's gas consumption for the past three years. In which of the following situations would you use inferential statistics?
- You want to know your car's average gas consumption.
 - You want to know whether this week's gas consumption is typical for your car.
 - You want to know the highest and lowest consumption across the three years.
 - You want to know whether winter consumption is significantly different from summer consumption.

ANSWER: d

139. What do we call statistics that are used to interpret data and draw conclusions?
- significant
 - descriptive
 - numerical
 - inferential

ANSWER: d

140. Which type of statistic allows us to determine whether the results of an experiment occur due to chance?
- standard deviation
 - measures of central tendency
 - descriptive
 - inferential

ANSWER: d

141. Paul just completed data analysis for his recent study, and the inferential statistics reveal that there is a 0.04 probability that his results occurred by chance. What can Paul state about his study?
- The results are meaningful.
 - The results are statistically significant.
 - The results are inconclusive.
 - The results are unreliable.

ANSWER: b

142. What does it mean to say that the results of an experiment are "statistically significant"?
- The results had practical significance.
 - Differences in measurements of the dependent variable resulted from chance variations.
 - Different results for the experimental and control groups were not due to chance.
 - The results were important enough to publish.

ANSWER: c

Chapter 2 - The Research Enterprise in Psychology

143. Paulo tells you that he just completed an experiment in his botany class, and the results he obtained were statistically significant. What does this mean?
- His results were likely to be caused by a single strong variable.
 - His results were unlikely to be a consequence of chance variations in his sample.
 - His results are important and will likely have an impact in the field of botany.
 - His results will be of interest to people, even if they are not botanists.

ANSWER: b

144. Masali 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. What must Masali do to be confident that an actual difference exists between males and females?
- calculate a correlation coefficient
 - calculate an inferential statistic
 - obtain a larger sample
 - evaluate the descriptive statistics

ANSWER: b

145. Dr. Arnold conducted a study where he found significant results. Dr. Bernhardt found those results interesting, and he conducted the same study in his own lab, but did not find significant results. After discussing their results at a conference, the two researchers found a few minor differences between their procedures that could explain their different results. This led to the development of new theories. What aspect of scientific evaluation is depicted in this series of events?
- peer-reviewed publication
 - experimenter bias
 - meta-analysis
 - replication

ANSWER: d

146. Dr. Aiken was interested in whether a particular effect was reliable, so he took a number of published studies and conducted special statistical procedures in order to compare the results across all of those studies. He found that the effect was very reliable across a variety of samples and situations. What type of procedure did Dr. Arnold conduct?
- peer-review
 - random sampling
 - meta-analysis
 - replication

ANSWER: c

Chapter 2 - The Research Enterprise in Psychology

147. Which of the following is present in most research studies but absent in meta-analysis?

- a. statistical analysis
- b. direct contact with participants
- c. a sample
- d. data

ANSWER: b

148. In research terms, what is a sample?

- a. a subset of the population who actually participate in a research study
- b. a group of people to whom the conclusion of the study will apply
- c. a group that contains fewer than 50 people or animals
- d. all the volunteers who express an interest in the study

ANSWER: a

149. 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, what do we call the 5,000 students who are registered at the campus?

- a. an independent variable
- b. the biased sample
- c. the population
- d. the representative sample

ANSWER: c

150. To discover whether residents of a city are in favour 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, what do we call the 500 people whom the owner interviewed?

- a. the representative sample
- b. the biased sample
- c. the population
- d. the dependent variable

ANSWER: a

Chapter 2 - The Research Enterprise in Psychology

151. If a researcher is particularly concerned about making sure that her results will generalize to the population as a whole, which of the following must she do?
- ensure that all the variables have been operationally defined
 - conduct a meta-analysis
 - use a double-blind procedure
 - draw a representative sample from the population of interest

ANSWER: d

152. A researcher who is conducting a survey about the concerns of average Canadians recruits participants through ads in a Toronto newspaper. What type of sample has the researcher created?
- a random sample
 - a biased sample
 - a representative sample
 - a binary sample

ANSWER: b

153. How should a researcher select subjects for a study in order to generate results that are generalizable?
- Subjects should all be chosen from the same geographical area and socio-economic class.
 - Subjects should be allowed to choose which group they would like to be in.
 - Subjects should be from WEIRD societies.
 - Subjects should be carefully chosen so that they are a representative sample of the population.

ANSWER: d

154. Why is sampling bias a problem?
- It makes it impossible to use inferential statistics.
 - It limits the generalizability of the findings.
 - It makes the effect of the independent variable appear to be bigger than it really is.
 - It makes it difficult to avoid a confounding of variables.

ANSWER: b

Chapter 2 - The Research Enterprise in Psychology

155. Dr. Stills is interested in people's reactions to a controversial jury verdict. Dr. Stills calls people at their home between the hours of 1:00 p.m. and 3:30 p.m. on a Tuesday afternoon. In this example, what type of sample has Dr. Stills most likely selected?
- a. a biased sample
 - b. a redundant sample
 - c. a bimodal sample
 - d. a representative sample

ANSWER: a

156. What are WEIRD societies?
- a. Groups that are considered to be minorities in North America
 - b. Groups that tend to have non-conformist results in psychology studies
 - c. Groups that are limited to a single race or ethnic group
 - d. Groups that are typically overrepresented in psychology research

ANSWER: d

157. What does the W stand for in WEIRD societies?
- a. Western
 - b. White
 - c. Well-educated
 - d. Wealthy

ANSWER: a

158. Tammy expects that she will be more likely to get a job offer if she wears red to her interviews. She wore red to each of her interviews and she got offered a job. Which of the following might have influenced Tammy's likelihood of being offered a job?
- a. placebo effect
 - b. socially desirable responding
 - c. halo effect
 - d. experimenter bias

ANSWER: a

Chapter 2 - The Research Enterprise in Psychology

159. Dr. Limmex is trying to get government approval for a new drug to treat anxiety. Dr. Limmex claims that 14 percent of the people who took this new drug reported reduced anxiety; however, other researchers claim that 14 percent of patients who receive no treatment also report reductions in their anxiety levels. What could explain patient improvement in Dr. Limmex's study?
- improper assignment to groups
 - non-representative sampling
 - placebo effects
 - self-report bias

ANSWER: c

160. In an investigation of the effects of caffeine on concentration, half the participants were given colas that contained caffeine and half were given decaffeinated colas. In this study, what is decaffeinated cola?
- a random factor
 - a confounding variable
 - a dependent variable
 - a placebo

ANSWER: d

161. Dr. Voegeli is testing the effects of a new diet supplement on the endurance levels of several groups of athletes. One group receives 50 ml per day of the supplement. A second group receives 50 ml per day of a substance that has no active component, but looks and tastes just like the supplement. A third group receives nothing at all. In this case, what would we call the second group?
- the experimental group
 - the comparison group
 - the control group
 - the placebo control group

ANSWER: d

162. Darla has sent out a survey in which she is asking people to provide information about their attitudes on a number of sensitive subjects. Why might Darla expect responses to the survey to be somewhat distorted?
- because of sampling bias
 - because of social desirability bias
 - because of experimenter bias
 - because of meta-analysis

ANSWER: b

Chapter 2 - The Research Enterprise in Psychology

163. How do subjects tend to answer questions about themselves when they are being influenced by the social desirability bias?

- a. in a socially approved manner
- b. in a socially rebellious manner
- c. by agreeing with nearly every statement
- d. by answering in a selfish manner

ANSWER: a

164. Which of the following researchers is most likely to encounter social desirability bias?

- a. Ahmed, who documents case studies of musical geniuses
- b. Barry, who tests the effectiveness of new drugs
- c. Celine, who conducts surveys about parenting behaviours
- d. Diane, who does field research with endangered species

ANSWER: c

165. Subjects' self-reports often indicate that they are healthier, happier, and less prejudiced than other types of evidence would suggest. What is the most likely explanation for these sorts of results?

- a. response set
- b. faulty memory
- c. social desirability bias
- d. experimenter bias

ANSWER: c

166. Reinhold is filling out a psychological test, and as he reads each question he thinks about the way most other people would probably respond. When he answers, he selects the alternative that he thinks will present the most favourable impression. What tendency will Reinhold's answers reflect?

- a. placebo effect
- b. social desirability bias
- c. non-representative sampling
- d. negative response set

ANSWER: b

Chapter 2 - The Research Enterprise in Psychology

167. What do we call the tendency to respond to questions in a manner unrelated to the content of a question?
- a. placebo effect
 - b. experimenter bias
 - c. response set
 - d. social desirability bias

ANSWER: c

168. Konrad dislikes completing questionnaires, so each time he fills one out he always circles the same answer, such as “strongly agree” or “strongly disagree.” What tendency does Konrad’s behaviour reflect?
- a. placebo effect
 - b. sampling bias
 - c. social desirability
 - d. response set

ANSWER: d

169. Malinda is filling out a survey for a marketing agency in order to be eligible for a grand prize drawing. She doesn’t actually read many of the questions, and simply answers “yes” to everything. What do we call this tendency?
- a. placebo effect
 - b. interaction effect
 - c. social desirability bias
 - d. response set

ANSWER: d

170. Sanja just bought a new car and is filling out a customer satisfaction survey. She loves her new car, and this leads her to fill out a glowing review. She indicated that she was “very satisfied” with the gas consumption of the car, even though it is much higher than her old car and she is paying more money than she would like. Which of the following terms reflects this positive review of a negative trait?
- a. social desirability bias
 - b. response set
 - c. experimenter bias
 - d. halo effect

ANSWER: d

Chapter 2 - The Research Enterprise in Psychology

171. Kim received a very positive performance evaluation from her supervisor. She expected the review to be strong, because she had worked hard and knew that she had performed well. She was surprised, however, to see that she got an “excellent” rating for punctuality. She knows she has been late to work repeatedly, and her supervisor was aware of it. Which of the following best explains this inaccurate positive evaluation?
- halo effect
 - social desirability bias
 - experimenter bias
 - placebo effect

ANSWER: a

172. Which of the following is an example of experimenter bias?
- An experimenter explicitly instructs subjects to complete tasks in a particular order, rather than allowing them to choose the order of completion.
 - An experimenter tries to make a favourable impression on the research subjects by being friendly and by providing a great deal of information.
 - An experimenter conducts her study in a completely objective manner.
 - An experimenter’s belief in his own hypothesis affects either the subjects’ behaviour or his observations of the subjects.

ANSWER: d

173. What is the typical consequence of experimenter bias?
- The effects of the bias confirm the experimenter’s expectations.
 - The results of the study are not statistically significant.
 - There is evidence of the placebo effect in the results of the experimental group.
 - Experimenters often doubt their results when they first see them.

ANSWER: a

174. Melvin and Leigh are interviewing students at their campus to determine if the students agree or disagree with a proposed policy change. Melvin believes the proposed policy change is a good idea, but Leigh believes the change will be bad for students. Nearly all the students who Melvin interviewed supported the policy change, but nearly all the students who Leigh interviewed disapproved of the change. Which of the following research problems could account for the different results?
- placebo effects
 - response set
 - confounded dependent variables
 - experimenter bias

ANSWER: d

Chapter 2 - The Research Enterprise in Psychology

175. What method is often used to control for experimenter bias effects in research?

- a. non-representative sample
- b. placebo control group
- c. socially desirable procedure
- d. double-blind procedure

ANSWER: d

176. In which of the following studies would it be impossible to implement a double-blind procedure?

- a. a study on the effects of a new pain medication
- b. a study that tests whether yoga influences mood
- c. an experiment that requires informed consent
- d. an experiment that has a completely representative sample

ANSWER: a

177. Dr. Hugo designs an experiment to test the effectiveness of a new antidepressant. Half of the participants will receive the drug and half will receive a sugar pill, but neither the participants nor the researchers who administer the drug will know who is receiving the drug and who is receiving the sugar pill. What has Dr. Hugo designed?

- a. a double-blind research study
- b. an unethical research procedure
- c. a study that will minimize self-report bias
- d. an experimental study with two confounded variables

ANSWER: a

178. Scarlett is a graduate student who is observing children playing together after watching a film. She knows that some children saw a film that contained graphic scenes of violence and some children saw a non-violent film, but she doesn't know which film each child she is observing watched. What would we call this type of procedure?

- a. correlational
- b. blind
- c. confounded
- d. double-blind

ANSWER: b

Chapter 2 - The Research Enterprise in Psychology

179. Dr. Pine is testing a new drug and has a placebo-control group. When he provides the drugs to patients and when he interviews them about side effects, he never knows whether the patient got the drug or the placebo. What is the most likely reason that Dr. Pine chose this type of research design?

- a. It reduces the impact of experimenter bias.
- b. It prevents the halo effect.
- c. It minimizes the possibility of self-report bias.
- d. It ensures that the sample is not biased.

ANSWER: a

180. Which of the following statements is most accurate?

- a. In recent years, there has been a steady increase in the use of deception in psychological research.
- b. Although deception has been used in the past, it has recently been banned by the American Psychological Association and the Canadian Psychological Association.
- c. Deception has been fairly common in psychological research since the 1960s.
- d. Deception has never been used in psychological research.

ANSWER: c

181. Which of the following is NOT one of the arguments that critics have used against the use of deception in psychological research?

- a. Lying is inherently immoral.
- b. Subjects may feel foolish when the true purpose of the study is revealed.
- c. The results of studies that use deception are inaccurate and untrustworthy.
- d. The subjects' ability to trust others may be undermined.

ANSWER: c

182. Zigfried Rosenblat, Jr. took part in a study on sexual deviance last year. He was somewhat dismayed when he read an article in a weekly journal discussing sexual deviance in which one patient was referred to as ZRJ. Although the article claimed all names had been disguised to protect personal identities, Zigfried is convinced he is the individual described in the article. In this case, which ethical principle did the researchers likely violate?

- a. responsible caring
- b. responsibility to society
- c. respect for the dignity of persons
- d. integrity in relationships

ANSWER: c

Chapter 2 - The Research Enterprise in Psychology

183. Which of the following is generally accepted regarding the use of animals in research under Canadian ethical guidelines?

- a. Animals can be used in research laboratories, but only in observational studies, not experimental studies.
- b. Animals can be used for any form of research, regardless of the dangers associated with that research.
- c. Animals are used in research only when there is a strong expectation that the results will benefit both humans and animals.
- d. Animals can be used in research but can be harmed only when there is clear evidence that the results will lead to treatments or cures for existing human or animal disorders.

ANSWER: c

184. Why must Canadian researchers adhere to ethical guidelines that are set by the Tri-Council?

- a. to be promoted within their university
- b. to have their research funded by the national granting agencies
- c. to have their research approved by independent provincial ethical boards
- d. to avoid criminal prosecution

ANSWER: b

185. Which of your text's unifying themes is illustrated by the fact that researchers focus their attention on findings that are unlikely to have occurred by chance?

- a. Psychology is theoretically diverse.
- b. People's experience of the world is highly subjective.
- c. Behaviour is determined by multiple causes.
- d. Psychology is empirical.

ANSWER: d

186. Psychology researchers publish the results of their studies so that other experts can evaluate and scrutinize those results. Which of your text's unifying themes is illustrated by this practice?

- a. People's experience of the world is highly subjective.
- b. Behaviour is determined by multiple causes.
- c. Psychology is empirical.
- d. Psychology is theoretically diverse.

ANSWER: c

Chapter 2 - The Research Enterprise in Psychology

187. Which of your text's unifying themes is illustrated by the fact that subjects sometimes report beneficial effects from a placebo treatment?
- a. Behaviour is shaped by our cultural heritage.
 - b. Heredity and environment jointly influence behaviour.
 - c. Psychology is empirical.
 - d. People's experience of the world is highly subjective.

ANSWER: d

188. Which of your text's unifying themes is illustrated by the fact that research results can be affected by experimenter bias?
- a. Psychology is theoretically diverse.
 - b. People's experience of the world is highly subjective.
 - c. Behaviour is shaped by our cultural heritage.
 - d. Behaviour is determined by multiple causes.

ANSWER: b

189. Who is the target audience for articles published in technical and scholarly journals?
- a. professionals in that field
 - b. the general public
 - c. anyone with an interest in the topic
 - d. students majoring in that field

ANSWER: a

190. Although there are several types of journal articles, which type is most common within psychology?
- a. manuscripts that propose new theories that are intended to stimulate research
 - b. reports that describe original, empirical studies
 - c. articles that describe and evaluate new treatment methods for psychological disorders
 - d. papers that summarize and reconcile the findings from a large number of studies on a specific issue

ANSWER: b

Chapter 2 - The Research Enterprise in Psychology

191. What is the major difference between review articles and articles that report original empirical studies?
- Review articles summarize findings from a large number of studies on a specific topic, whereas most empirical articles are more limited in scope.
 - Review articles are published in books while empirical articles are published in journals.
 - Review articles are used to evaluate new techniques, whereas empirical articles report new research results.
 - Review articles are reviewed by experts before they are published in the journal, unlike most empirical articles.

ANSWER: a

192. Where would you look to find a database of research literature in psychology, and brief summaries of individual research studies?
- Canadian Psychological Association home page
 - Psychological Review*
 - Psychology Today*
 - PsycINFO*

ANSWER: d

193. What is the benefit of reading an abstract?
- It can be quickly scanned to determine whether the rest of the article is relevant for your purposes.
 - It shows a detailed description of the research methods that the researchers used.
 - It provides you with all of the results and detailed statistics, so you can determine whether the results are significant.
 - It summarizes all the research that led the researchers to their current hypothesis.

ANSWER: a

194. In which section of a journal article would you look for the hypotheses for a research study?
- results
 - methodology
 - references
 - introduction

ANSWER: d

Chapter 2 - The Research Enterprise in Psychology

195. Where in a journal article would you look for the data obtained in a research study, along with the statistical analyses?
- discussion
 - results
 - method
 - abstract

ANSWER: b

196. What is provided in the reference list at the end of a research article?
- abstracts for all the previous research studies by the same authors
 - list of related articles on the same topic by a variety of authors
 - bibliographic information for any studies referred to in the article
 - the author's phone number, address, and website

ANSWER: c

197. When we say that persons are using anecdotal evidence to support their claims, what do we mean?
- The evidence is not true.
 - The evidence is based on social desirability bias.
 - The evidence was collected from a variety of sources.
 - The evidence is based on personal experiences.

ANSWER: d

198. What can we conclude from studies that have investigated the influence of anecdotal information?
- People are not influenced by anecdotal information, and tend to view it as non-representative and biased.
 - People tend to be influenced by anecdotal information, even when they are forewarned that the information is not representative.
 - People are influenced by anecdotal evidence only when they have not been forewarned that it may be misleading.
 - People are influenced by anecdotal evidence only when it is provided by someone they know and trust.

ANSWER: b

Chapter 2 - The Research Enterprise in Psychology

199. Annabel wants a new phone. She has narrowed her choice down to two models. Alfred tells Annabel, “*Consumer Reports* did extensive testing and rated the X5 as the highest overall. The same article indicated that the uPhone is unreliable.” Francine tells Annabel, “My uncle had the X5 and had problems with it. He switched to the uPhone and loves it.” Which phone is Annabel likely to buy, based on results reported in the Critical Thinking Application?
- The uPhone, because she will be more persuaded by the anecdotal evidence.
 - The X5, because she will be more persuaded by objective evidence.
 - Neither phone, because she would prefer to do her own research rather than rely on subjective opinions.
 - Neither phone, because the two reports her friends provided conflict with each other.

ANSWER: a

Chapter 2 - The Research Enterprise in Psychology

Dr. Amalie

Dr. Amalie is a social psychologist who is interested in the effects of group size on efficiency and on the satisfaction of individual group members. In a study conducted by Dr. Amalie's research team, three different group sizes were used. Large groups had 20 people, medium groups had ten people, and small groups had four people. There were ten sessions run with each type of group, and each group contained different individuals, so the total number of groups was 30 and the total number of participants was 340. All participants were students at the school where Dr. Amalie works. The groups were told that they needed to come to agreement about which movie to select for an upcoming student movie night. The time that it took each group to come to a decision was recorded. Afterward, each subject was asked to rate his or her satisfaction with the group's decision (on a scale from 1 to 10, where 10 is totally satisfied).

The results were as follows:

Mean time required to come to an agreement (all differences are statistically significant):

Large groups: 20.7 minutes

Medium groups: 16.4 minutes

Small groups: 10.3 minutes

Mean satisfaction rating for individuals (all differences are statistically significant):

In large groups: 4.6

In medium groups: 7.5

In small groups: 8.8

200. In this study, what is the operational definition of efficiency?

- a. difference between speed and satisfaction
- b. size of the group
- c. satisfaction ratings
- d. speed of decision

ANSWER: d

201. Which type of study did Dr. Amalie's research team conduct?

- a. experiment
- b. double-blind procedure
- c. case study
- d. naturalistic observation

ANSWER: a

Chapter 2 - The Research Enterprise in Psychology

202. Which of the following is a measure of central tendency from this study?

- a. The satisfaction rating for large groups is 4.6.
- b. The difference in decision time between small groups and large groups is 10.4 minutes.
- c. There was a total of 340 participants in the study.
- d. The range of potential satisfaction scores is from 1 to 10.

ANSWER: a

203. What conclusion can you draw from the results of this study?

- a. Smaller groups are more likely to be influenced by the opinion of one individual.
- b. Group size is confounded with satisfaction ratings.
- c. Medium-sized groups have only a moderate amount of disagreement.
- d. Larger groups take longer to come to a decision.

ANSWER: d

204. What is the independent variable in this study?

- a. satisfaction of individual group members
- b. efficiency, as measured by speed of decision making
- c. group size
- d. comparing multiple groups

ANSWER: c

205. How many dependent variables are used in this study?

- a. 1
- b. 2
- c. 3
- d. 10

ANSWER: b

206. There appears to be a correlation between efficiency and satisfaction, such that the less time required to make a decision, the greater the satisfaction of the group members. Which of the following correlation coefficients would reflect this relationship?

- a. +0.85
- b. +0.05
- c. 0.00
- d. -0.79

ANSWER: d

Chapter 2 - The Research Enterprise in Psychology

207. Which of the following is important to the scientific method because the scientific method is intolerant of error?
- naturalistic observation
 - placebo effects
 - replication
 - hypotheses

ANSWER: c

208. Which method do researchers use precisely because our experience of the world is highly subjective?
- psychoanalytic methods
 - independent variables
 - double-blind procedure
 - case studies

ANSWER: c

209. Which of the following sets of concepts is NOT a closely related set?
- correlation, sample, journal
 - method, results, discussion
 - experiment, independent variable, control group
 - mean, median, mode

ANSWER: a

210. Imagine that a group of researchers designed a study to test the effectiveness of subliminal-message weight-loss tapes. Half the participants receive real tapes, and half receive similar tapes with the subliminal messages removed. The experimenter keeps track of which participant is in which group. All the participants are told that their tapes contain subliminal messages. What type of study is this?
- anecdotal research
 - case study
 - double-blind procedure
 - single-blind study

ANSWER: d

Chapter 2 - The Research Enterprise in Psychology

211. Imagine that a group of researchers conducted a study designed to test the effectiveness of subliminal-message weight-loss tapes. Suppose the researchers found that everyone lost weight during the study, even those who were given tapes without any subliminal messages. What could we conclude from the results?
- The independent and dependent variables in the study are negatively correlated.
 - There is evidence that the study contained confounding variables.
 - There is evidence of a placebo effect.
 - Subliminal tapes are effective in promoting weight loss.

ANSWER: c

212. Dr. Klassen is conducting a study on attitudes about drug use. She wants to administer a survey. Which of the following groups of issues should she pay most attention to when she is designing her study?
- random sampling, use of a control group, inferential statistics
 - representative sampling, self-report bias, response set
 - representative sampling, experimenter bias, ethics regarding deception
 - random assignment, experimenter bias, placebo effects

ANSWER: b

213. Dr. Friesen wants to investigate whether store clerks behave in a discriminatory manner toward teenagers. He is trying to decide between using naturalistic observation and using a questionnaire. What would be the best choice?
- Questionnaires, because clerks would become angry and refuse to participate if they knew you were spying on them.
 - Naturalistic observation, because you can record behaviour and avoid self-report bias.
 - Questionnaires, because you'll be able to make cause-and-effect statements.
 - Naturalistic observation, because clerks would likely refuse to respond to questionnaires.

ANSWER: b

214. Design a simple experiment to investigate the effects of television violence on children's aggressive behaviour, being sure to identify the independent and dependent variables, and the experimental and control groups.

ANSWER: There are numerous possible experimental designs. Make sure there is an explicit, testable hypothesis; that "television violence" and "aggressive behaviour" are operationally defined; that children are randomly assigned to groups; and that the control group is exposed to nonviolent television rather than to no television at all.

215. Design a simple descriptive/correlational study to investigate the relationship between television violence and children's aggressive behaviour.

ANSWER: Again, there are numerous possibilities. Make certain that both variables are operationally defined; that a specific descriptive/correlational method (such as naturalistic observation or survey) is selected; and that causation is neither stated nor implied.

Chapter 2 - The Research Enterprise in Psychology

216. What are the relative weaknesses and strengths of descriptive/correlational research as opposed to experimental research? Under what conditions would a psychologist choose one method as opposed to the other?

ANSWER: Experimental research is the more powerful of the two methods, in that it allows precise control over the independent variable and therefore yields cause-and-effect conclusions. On the other hand, experiments may be somewhat artificial and often cannot be done for ethical reasons. Descriptive/correlational studies are conducted in the subjects' natural environment, they are easier and faster to do than experiments, and they can be done ethically in many circumstances in which experiments cannot. However, the researcher has little control over extraneous variables, and so cause-and-effect conclusions cannot be drawn. The choice between the two methods is a function of practical and ethical considerations.

217. What is the difference between a positive correlation and a negative correlation? List some specific variables that you predict would be positively correlated, and variables that would be negatively correlated, with alcohol consumption by college students.

ANSWER: Positive correlation: As scores on variable X increase, scores on variable Y tend to increase, too. Examples are alcohol consumption and body weight, and alcohol consumption and number of missed classes.

Negative correlation: As scores on variable X increase, scores on variable Y tend to decrease. Examples are alcohol consumption and coordination, and alcohol consumption and grade point average.

218. Describe the problems in research associated with placebo effects and experimenter bias, and explain how you would attempt to prevent these problems within a research design.

ANSWER: Placebo effects: Participants may expect an effect of an experimental treatment, and so will feel an effect or show a change in behaviour. This change is due to expectancy, not to manipulation of the independent variable. You would deal with this problem by having a placebo control group (a group that gets an inert version of the independent variable) so that you can compare the change in the experimental group to the change in a group that received a placebo.

Experimenter bias: Researchers may unwittingly lead participants to respond in a particular way, or may interpret their data in a particular way that confirms their pre-existing hypotheses. In order to avoid this effect, it is recommended that the studies be designed as single-blind (where the experimenter doesn't know which condition the participants are in) or double-blind (where neither the experimenters nor the participants know who is in which group). [NOTE: A double-blind study may also control for some aspects of placebo effects, so long as both active and inert versions of the independent variable are given.]