

Chapter 2

1) _____ biases are systematic errors in thinking.

- A) Confirmation
- B) Hindsight
- C) Cognitive
- D) Functional

Diff: 2 Page Ref: 50-52

Learning Outcome: 2.1

2) A mental shortcut that helps us to streamline our thinking and make sense of our world is called a

- A) theory.
- B) heuristic.
- C) schema.
- D) mental reference.

Diff: 1 Page Ref: 51

Learning Outcome: 2.1

3) Dr Fortner is discussing cognitive psychology with his introductory psychology class and says that we act as cognitive misers when making judgements about others or making decisions. What does Dr Fortner mean with this statement?

- A) We are frequently incorrect in our judgements and decision making.
- B) We value accuracy in our judgements and decisions.
- C) We are lazy and conserve mental energy by simplifying the world.
- D) We will use heuristics only as long as they give us the correct answer.

Diff: 3 Page Ref: 51

Learning Outcome: 2.1

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

4) When judging people, we often focus on how closely they fit with our stereotypes of particular groups. According to Kahneman, this is an example of _____ thinking.

Diff: 2 Page Ref: 51

Learning Outcome: 2.1

5) The view of humans as cognitive processors who are lazy, looking to make judgements quickly, and without much effort is known as the _____ perspective.

Diff: 1 Page Ref: 51

Learning Outcome: 2.1

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

6) An important danger of the heuristics and cognitive biases discussed in Chapter 2 is that they lead us

- A) to become anxious or depressed about our place in the world.
- B) to draw incorrect conclusions and then become convinced that they are accurate.
- C) to doubt our intuition and gut feelings in important real-life circumstances.
- D) to underestimate our general levels of cognitive abilities and skills.

Diff: 1 Page Ref: 51-52

Learning Outcome: 2.1

7) Amanda asks a group of research participants to estimate the number of deaths each year due to homicide and diabetes. She finds that higher numbers report homicide, because they are more vivid examples, though over twice as many die from complications related to diabetes. This is one example of the dangers of the _____ in our judgements and decision

making.

- A) availability heuristic
- B) confirmation bias
- C) hindsight bias
- D) representativeness heuristic

Diff: 2 Page Ref: 58

Learning Outcome: 2.1

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

8) The more easily an image of an horrific event comes to mind, like a major airline crash or a bloody image from a school shooting, the more often we assume it occurs. In reality, however, each of these is a relatively rare, infrequent event. We have fallen victim to the _____.

Diff: 1 Page Ref: 58

Learning Outcome: 2.1

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

9) Which of the following statements is true about naturalistic observation?

- A) It re-creates natural conditions in the laboratory as closely as possible to make an experiment more valid.
- B) It involves observing behaviour in its natural context.
- C) It is basically the same process as objective introspection.
- D) It involves observing behaviour in the lab without taking formal notes or using technological equipment to measure the experimental findings.

Diff: 1 Page Ref: 53-54

Learning Outcome: 2.2

10) Jason was conducting an evaluation of a restaurant waitress. He sat at the table with a list of things to observe in front of him, and the waitress noticed that he was assessing her every move. He noticed that she began acting more professionally around him, was friendlier, and gave him extra attention. Why would Jason have been better off using naturalistic observation for this assessment?

- A) So that he could have more experimental control over his independent variable.
- B) So that he would be sure to "catch" the waitress behaving unprofessionally.
- C) So that he could have been sure to get enough data to use proper statistics.
- D) So that his observations would not have changed the waitress's behaviours.

Diff: 1 Page Ref: 53-54

Learning Outcome: 2.2

11) A student researcher wishes to maximise the external validity of his or her research design. What research method should you recommend to him or her?

- A) Case study design
- B) Correlational design
- C) Experimental design
- D) Naturalistic observational design

Diff: 3 Page Ref: 53-54

Learning Outcome: 2.2

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

12) If a researcher investigated the topic of aggression by simply recording instances of aggression on a school playground, in a place of business, in a nightclub, and in many other everyday settings, he or she would be using the research design of _____.

Diff: 1 Page Ref: 53-54

Learning Outcome: 2.2

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

13) Which research design involves an extremely deep and detailed information gathering from a single individual over a long period of time.

- A) Case study design
- B) Correlational design
- C) Experimental design
- D) Naturalistic observation design

Diff: 1 Page Ref: 54-55

Learning Outcome: 2.2

14) The study of rare or unusual phenomena is most easily done through the use of the _____ design.

- A) case study
- B) correlational
- C) experimental
- D) observational

Diff: 2 Page Ref: 54-55

Learning Outcome: 2.2

15) Sarah, a graduate student in psychology, just heard about a five-year-old child who has already learned calculus. She is thinking about doing an in-depth study of the child for her dissertation. Sarah is considering which research method?

- A) Naturalistic observation
- B) Experiment
- C) Independent study
- D) Case study

Diff: 2 Page Ref: 54-55

Learning Outcome: 2.2

16) Why is it difficult to make generalisations based on the results of case study research?

- A) Because case study research is, by definition, immune to the error of making generalisations. That is its greatest strength!
- B) Because case studies involve far too many people to allow for generalisations. You would be better off using a research design that uses fewer participants.
- C) Because a case study involves only one or a few subjects, their actions may be atypical and not representative of a larger group of people or population.
- D) Because the statistics involved in case study research do not allow one to draw larger conclusions about a population.

Diff: 3 Page Ref: 54-55

Learning Outcome: 2.2

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

17) Despite being unable to determine _____ correlational designs are important in providing understanding of naturally occurring phenomena which could not ethically be experimentally manipulated.

Diff: 2 Page Ref: 53

Learning Outcome: 2.3

18) The major advantage of a correlational design over a naturalistic observation or a case study design is that a correlational design allows us to _____.

Diff: 2 Page Ref: 55-59

Learning Outcome: 2.3

19) According to the authors, many superstitious behaviours result from _____.

Diff: 2 Page Ref: 57-58

Learning Outcome: 2.3

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

20) Correlational research designs are NOT appropriate for purposes of

- A) causation.
- B) description.
- C) prediction.
- D) describing relationships.

Diff: 2 Page Ref: 53

Learning Outcome: 2.4

21) If you are interested in examining the relationship between the number of class days missed and one's subsequent semester grade point average, you would be best served to use a(n) _____ to study this question.

- A) case study design
- B) correlational design
- C) experimental design
- D) naturalistic observation design

Diff: 2 Page Ref: 55-59

Learning Outcome: 2.4

22) Two variables are said to have a correlation when scores on one variable

- A) are unrelated to the scores on the second variable.
- B) are related to scores on the second variable.
- C) effect the scores on the second variable.
- D) are different from the scores on the second variable.

Diff: 2 Page Ref: 55-59

Learning Outcome: 2.4

23) A correlation coefficient will always range between

- A) 0 and 1.
- B) -10 and +10.
- C) 0 per cent and 100 per cent.
- D) -1.0 and +1.0.

Diff: 1 Page Ref: 56

Learning Outcome: 2.4

24) Which of the following correlations represents the *weakest* degree of relation between two variables?

- A) Daily calcium intake and bone mass density, $r = +.11$
- B) Degree of exposure to lead and IQ scores in children, $r = -.12$
- C) Hours of exposure to media violence and aggressive behaviour, $r = +.31$
- D) Number of cigarettes smoked per day and incidence of lung cancer, $r = +.39$

Diff: 1 Page Ref: 56

Learning Outcome: 2.4

25) Which of the following correlation coefficients represents the *strongest* degree of relation between two variables?

- A) +0.19
- B) -0.25
- C) +0.43
- D) -0.47

Diff: 2 Page Ref: 56

Learning Outcome: 2.4

26) If there is no discernible relationship between scores on students' homework assignments and their exam scores in an introductory psychology class, we would say that a(n) _____ correlation exists.

- A) inverse
- B) negative
- C) positive
- D) zero

Diff: 3 Page Ref: 55-56

Learning Outcome: 2.4

27) Hopefully, the amount of time a student spends studying would show a(n) _____ correlation with the student's grades.

- A) negative
- B) spurious
- C) positive
- D) illusory

Diff: 2 Page Ref: 55-56

Learning Outcome: 2.4

28) There is a negative correlation between wearing one's seat belt and the severity of injuries received during an accident. Which statement correctly illustrates this correlation?

- A) The more often you wear your seat belt, the more serious the injury you are likely to receive in an accident.
- B) The more often you wear your seat belt, the less likely you are to suffer serious injuries in an accident.
- C) Wearing your seat belt prevents you from being injured in an accident.
- D) Failing to wear your seat belt increases the likelihood that you will sustain serious injuries in an accident.

Diff: 2 Page Ref: 55-56

Learning Outcome: 2.4

29) Authorities have noted that there is an increased number of teen pregnancies among high schools that offer daycare to their students. We can draw which of the following conclusions?

- A) The presence of daycare is causing students to become sexually active.
- B) High schools that provide daycare are also offering sexual education.
- C) There is a negative correlation between teen pregnancies and daycare in the high schools.
- D) There is a positive correlation between teen pregnancies and daycare in the high schools.

Diff: 3 Page Ref: 55-59

Learning Outcome: 2.4

30) A graph that can be used to represent the pattern of relationship between scores from two variables is called a

- A) bar graph.
- B) frequency polygon.
- C) histogram.

D) scatterplot.

Diff: 1 Page Ref: 56-57

Learning Outcome: 2.4

31) Dr Schott's scatterplot reveals no real patterns or clusters. In fact, the data seems to fall randomly on the graph. This pattern of results is most likely from which type of correlation?

- A) Positive
- B) Zero
- C) Negative
- D) Skewed

Diff: 2 Page Ref: 56-57

Learning Outcome: 2.4

32) Dr Stanhope is trying to determine which type of correlation is represented on his scatterplot, in which nearly all of his data are clustered along a diagonal line running from higher numbers on the left down to lower numbers on the right. Which type of correlation is represented by this pattern?

- A) Positive
- B) Zero
- C) Negative
- D) We need more information to draw a conclusion.

Diff: 2 Page Ref: 56-57

Learning Outcome: 2.4

33) For many years, newspapers often mentioned the race of criminal suspects who were NOT white in the article detailing their crimes. This often led people who were not obviously biased or prejudiced to conclude that more non-whites committed crimes than whites. This is one example of

- A) the confirmation bias.
- B) the hindsight bias.
- C) an illusory correlation.
- D) the representativeness heuristic.

Diff: 2 Page Ref: 57-58

Learning Outcome: 2.4

34) The perception of a statistical association between two variables where none exists is known as

- A) confirmation bias.
- B) illusory correlation.
- C) existence proof.
- D) type I error.

Diff: 1 Page Ref: 57-58

Learning Outcome: 2.4

35) When asked if there are more ice-cream cones sold in November or July, Mary answers November immediately. She is surprised to find out that there is little to no difference between the two months in terms of ice-cream-cone sales. Mary's error is most clearly an example of

- A) imaginary correlation.
- B) commonsense.
- C) superstitions.
- D) illusory correlation.

Diff: 2 Page Ref: 56-57

Learning Outcome: 2.4

36) _____ studies allow us to make predictions about one variable based on the knowledge of another.

- A) Case
- B) Experimental
- C) Natural
- D) Correlational

Diff: 1 Page Ref: 55-59

Learning Outcome: 2.4

37) What is the main difference between an experiment and a correlational study?

- A) A correlational study involves the manipulation of variables, while an experiment does not.
- B) An experiment looks at the relationship between independent and dependent variables, while a correlational study looks at the relationship between within-group and between-group variables.
- C) A correlational study looks at the relationship between independent and dependent variables, while an experiment looks at the relationship between within-group and between-group variables.
- D) An experiment involves the manipulation of variables, while a correlational study does not.

Diff: 2 Page Ref: 60

Learning Outcome: 2.4

38) The only research design that allows one to make cause-effect inferences is the _____ design.

- A) case study
- B) correlational
- C) experimental
- D) naturalistic observation

Diff: 2 Page Ref: 60

Learning Outcome: 2.4

39) A research design characterised by random assignment of participants to conditions and manipulation of an independent variable is called a(n)

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

Diff: 2 Page Ref: 60

Learning Outcome: 2.4

40) A key aspect of an experiment that is missing in other research designs is

- A) description of the phenomena of interest.
- B) explanation of why a relationship exists.
- C) prediction of the effects of differences in variable on another.
- D) random assignment.

Diff: 2 Page Ref: 60

Learning Outcome: 2.4

41) In an experiment, the _____ group receives no manipulation.

- A) control

- B) dependent
- C) independent
- D) experimental

Diff: 1 Page Ref: 60

Learning Outcome: 2.4

42) A researcher wants to see whether she can make the typical administrative assistant job more motivating at Acme, Inc. To experimentally investigate this possibility, she randomly assigns administrative assistants to one of the following conditions: doing the job as it has always been done, having a computer performance monitoring device installed, receiving feedback about their performance on a weekly basis, or being given a say in how one's workload is structured and done. Which of the preceding conditions is an example of a *control group*?

- A) Being given a say in how one's workload is structured and done
- B) Doing the job as it has always been done
- C) Having a computer performance monitoring device installed
- D) Receiving feedback on a weekly basis

Diff: 2 Page Ref: 60

Learning Outcome: 2.4

43) Dr Johansen randomly assigned subjects to three different groups during her last experiment. She then proceeded to give all the participants in the experiment a new study technique designed to enhance their learning for the upcoming test. What critical error did she make during her experiment?

- A) She failed to identify the independent variable.
- B) She failed to identify the dependent variable.
- C) She failed to include an experimental group.
- D) She failed to include a control group.

Diff: 3 Page Ref: 60

Learning Outcome: 2.4

44) The group that receives the manipulation is called the

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

Diff: 1 Page Ref: 60

Learning Outcome: 2.4

45) The _____ variable is what the experimenter "manipulates" or varies.

- A) control
- B) dependent
- C) operational
- D) independent

Diff: 1 Page Ref: 60

Learning Outcome: 2.4

46) The variable that an experimenter assesses or measures is called the

- A) causal variable.
- B) confounding variable.
- C) dependent variable.

D) independent variable.

Diff: 2 Page Ref: 60

Learning Outcome: 2.4

47) A medical doctor believes that the presence of aromatherapy will reduce the anxiety of first-time mothers-to-be during labour and will increase their reported satisfaction with their care at his hospital. He randomly assigns mothers to give birth in a room either with or without aromatherapy. What is the *independent* variable in this example?

- A) Anxiety level during labour
- B) Number of previous birthing experiences
- C) Room environment
- D) Satisfaction with hospital care

Diff: 3 Page Ref: 60

Learning Outcome: 2.4

48) Professor Todd decides to test her hypothesis that eating chocolate prior to exams increases students' test scores. She randomly assigns students to two groups at the beginning of the semester. One group receives a bar of chocolate before each test, while the other group receives another type of candy. She compares their scores at the end of the year, and finds that the students who ate the chocolate scored an average of ten points higher on their exams. What is the dependent variable in this experiment?

- A) Students' test scores
- B) Chocolate bars
- C) The students themselves
- D) The professor

Diff: 2 Page Ref: 60

Learning Outcome: 2.4

49) The most important factor to ensure that one's results apply to other people in other settings is to use

- A) extremely large sample sizes.
- B) extremely small sample sizes.
- C) random assignment.
- D) random selection.

Diff: 2 Page Ref: 60

Learning Outcome: 2.4

50) Sue asked three of her friends after class if they thought the test they just finished taking was as easy as she thought it was. They all agreed that it was. She was surprised to find out the next day that although she and her friends had indeed done well, a majority of the class had failed. Why shouldn't Sue have been surprised?

- A) Most of the students did not study for the test.
- B) She did not use random selection when asking people about the test.
- C) Students should have been randomly assigned to take the tests on different days.
- D) Her friends shouldn't have expressed their views regarding the test.

Diff: 2 Page Ref: 60

Learning Outcome: 2.4

51) Professor Todd decides to test her hypothesis that eating chocolate prior to exams increases students' test scores. She randomly assigns students to two groups at the beginning of the semester. One group receives a bar of chocolate before each test, while the other group receives another type of candy. She compares their scores at the end of the year, and finds that the students who ate the chocolate scored an average of ten points higher on their exams. What is a fair conclusion that can be drawn from this experiment?

- A) Eating chocolate causes students' test scores to increase.
- B) Eating chocolate has no relationship to students' test scores.
- C) Eating chocolate may increase students' satisfaction with the class.
- D) Eating chocolate makes students happy.

Diff: 1 Page Ref: 60-61

Learning Outcome: 2.4

52) A difference between experimental and control groups other than the independent variable is a _____ variable.

- A) confounding
- B) dependent
- C) false
- D) placebo

Diff: 1 Page Ref: 61

Learning Outcome: 2.4

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

53) The ability to state that differences in the conditions of the independent variable led to the observed differences in the dependent variable is lessened when a(n) _____ variable is present in one's research design.

Diff: 3 Page Ref: 61

Learning Outcome: 2.4

54) One important limitation of the experimental design is that when research participants know what condition they have been assigned to, this knowledge, rather than the independent variable, may be the cause of the differences observed in the dependent variable. This is known as the _____ effect.

Diff: 3 Page Ref: 61-62

Learning Outcome: 2.4

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

55) One difficulty in conducting medical research is that participants often assume that any treatment will be effective in alleviating their symptoms. Therefore, a researcher has to design an experiment that measures the influence of

- A) random selection.
- B) medical confounds.
- C) the Rosenthal effect.
- D) the placebo effect.

Diff: 2 Page Ref: 61-63

Learning Outcome: 2.4

56) Dr Wilkins randomly assigns subjects to one of three groups. He is interested in the effects of caffeine on anxiety levels. He gives subjects in the first group an extra two cups of coffee a day for six months. The second group receives an extra two cups of decaffeinated coffee a day for the same time period, while the control group is not given either regular or decaffeinated coffee. By providing one group with decaffeinated coffee, Dr Wilkins is trying to account for which potential element of the experiment?

- A) A control condition
- B) The Rosenthal effect
- C) The placebo effect
- D) The artificial condition

Diff: 2 Page Ref: 61-63

Learning Outcome: 2.4

57) Lisa, a university student, had a great time at the party last night. She danced, sang karaoke, and even played the "rock

band" video game, all behaviours that she had never exhibited in public before. She had been drinking the "punch" all night long, which she was told contained high levels of alcohol. Lisa was quite surprised to find out the next morning that the punch did NOT contain any alcohol. What concept may explain Lisa's behaviour?

- A) The Rosenthal effect
- B) Illusory correlations
- C) The nocebo effect
- D) The placebo effect

Diff: 2 Page Ref: 61-63

Learning Outcome: 2.4

58) The placebo and nocebo effects are examples of _____ in experimental research.

- A) confounding variables
- B) dependent variables
- C) false variables
- D) independent variables

Diff: 3 Page Ref: 61-64

Learning Outcome: 2.4

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

59) When neither the experimenter nor the participant have any knowledge of the experimental condition to which the participant has been assigned we say that this is a(n) _____ study.

Diff: 2 Page Ref: 64

Learning Outcome: 2.4

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

60) An experiment is said to be _____ when neither researchers nor participants are aware of who's in the experimental or control group.

- A) blind
- B) unfalsifiable
- C) a placebo
- D) double-blind

Diff: 2 Page Ref: 64

Learning Outcome: 2.4

61) How does conducting a double-blind study attempt to remedy the experimenter expectancy effect?

- A) The experimenter does not know but the participant does know what condition the participant is assigned to.
- B) The experimenter and the participant both know what condition the participant is assigned to.
- C) The experimenter knows but the participant does not know what condition the participant is assigned to.
- D) Neither the experimenter nor the participant knows what condition the participant is assigned to.

Diff: 2 Page Ref: 64

Learning Outcome: 2.4

62) _____ is a phenomenon in which researchers' hypotheses lead them to unintentionally bias the outcome of a study.

- A) Durability bias
- B) Experimenter expectancy effect
- C) Availability heuristic
- D) Confounding variable

Diff: 1 Page Ref: 64-65

Learning Outcome: 2.4

63) Marissa just finished completing her new employee questionnaire form for a job in sales. Despite being a rather shy, introverted person, Marissa checked all the areas that referred to her as a talkative and outgoing individual. She believes those extroverted characteristics are exactly what her new employer is looking for. Which concept is being illustrated?

- A) Participant bias
- B) The primacy effect
- C) Demand characteristics
- D) The Rosenthal effect

Diff: 2 Page Ref: 65

Learning Outcome: 2.4

64) Eila is participating in a psychological experiment for one of the graduate students at her university. She is pretty confident that she knows the true intent of the study and is trying to answer the questions accordingly. A common pitfall in experiments, Eila is falling prey to

- A) intentionality.
- B) the Rosenthal effect.
- C) observer bias.
- D) demand characteristics.

Diff: 2 Page Ref: 65

Learning Outcome: 2.4

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

65) _____ is the most important part of ensuring the generalisability of one's results to the general population.

Diff: 3 Page Ref: 66

Learning Outcome: 2.4

66) Dr Barrios is examining the relationship between student scores on a practice test in his senior-level class with their actual performance, with different questions, on his first exam. If there is consistency or stability in these scores, Dr Barrios would be able to say that _____ exists.

Diff: 2 Page Ref: 66

Learning Outcome: 2.4

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

67) _____ is consistency of measurement.

- A) Random assignment
- B) Validity
- C) Reliability
- D) Confounding variable

Diff: 2 Page Ref: 66-67

Learning Outcome: 2.4

68) Dr Riviera measures his students' knowledge on the topic of memory by giving them three different quizzes over the course of three weeks (one a week). He is hoping to show that student scores are largely the same from week to week. He is trying to establish the _____ of his quiz.

- A) objectivity
- B) reliability
- C) subjectivity
- D) validity

Diff: 3 Page Ref: 66-67

Learning Outcome: 2.4

69) When assessing patients' personalities using an "ink blot" test that she created, Dr Hardcastle is gaining confidence in the test's reliability. Which of the following is likely to be happening?

- A) Her patients are enjoying being tested every day.
- B) The test is generating approximately the same results each time.
- C) The test is measuring what it is supposed to be measuring.
- D) The test is likely to be uninformative.

Diff: 1 Page Ref: 66-67

Learning Outcome: 2.4

70) _____ is the extent to which a measure assesses what it claims to measure.

- A) Operationalisation
- B) Reliability
- C) Validity
- D) Control group

Diff: 1 Page Ref: 67

Learning Outcome: 2.4

71) The most important characteristic for a psychological measure to have is

- A) objectivity.
- B) readability.
- C) reliability.
- D) validity.

Diff: 3 Page Ref: 67

Learning Outcome: 2.4

72) Sarula recently completed a compatibility "quiz" from one of her favourite magazines, and although she and her boyfriend have been dating for nearly two years, the "quiz" results suggested they are not compatible. Luckily, Riley, one of Sarula's friends, is a student of psychology and suggested that the "quiz" may not be valid. What is her friend suggesting?

- A) The "quiz" only gives you the answers you want.
- B) The "quiz" is going to give you similar results every time.
- C) The "quiz" is not very scientific.
- D) The "quiz" may not actually measure compatibility.

Diff: 3 Page Ref: 67

Learning Outcome: 2.4

73) Jasmine took several different self-administered intelligence tests online yesterday and obtained scores of 124, 128, and 125. She felt great, because the score she received from the psychologist last month at school was only a 95. What characteristic might the online tests be lacking?

- A) Reliability
- B) Validity
- C) Both reliability and validity
- D) The tests appear to have both reliability and validity.

Diff: 3 Page Ref: 67

Learning Outcome: 2.4

74) Dr Potter, an English professor, is curious about his students' attitudes towards one of his favourite books. What

- B) To hinder the research process by placing unnecessary hurdles in the way of researchers
- C) To help protect the university from lawsuits from unhappy research participants
- D) To encourage the use of deception in medical and psychological research with humans

Diff: 3 Page Ref: 71

Learning Outcome: 2.5

80) Students of psychology are often frustrated because there are very few, if any, clear-cut answers to many of their questions. What is the primary limiting factor in obtaining first-hand knowledge of questions such as the long-term effects of child abuse or the effects of smoking marijuana on a pregnancy?

- A) Most people in the general public are not concerned with these issues.
- B) It is difficult to find people who are victims of abuse or mothers who smoke marijuana during pregnancy.
- C) Ethical guidelines in research prevent psychologists from carrying out many of these studies.
- D) Institutional review boards encourage participation in studies that may be harmful to participants either mentally or physically.

Diff: 1 Page Ref: 71-72

Learning Outcome: 2.5

81) Dr Williams believes that by administering brief electric shocks to his students, he can improve their attention to his lectures. He blames daydreaming and inattention by his students for their poor performance in his class. His colleagues are not convinced that the potential benefits to the students will outweigh the physical pain they may endure. Ultimately, what will Dr Williams have to obtain from his students before proceeding?

- A) Medical records
- B) A debriefing of the results of the study
- C) Information about the students' parents
- D) Informed consent

Diff: 2 Page Ref: 71-72

Learning Outcome: 2.5

ESSAY. Write your answer in the space provided or on a separate sheet of paper.

82) Describe the roles of Human Research Ethics Committees and statements of informed consent within the human research process.

Diff: 3 Page Ref: 71-74

Learning Outcome: 2.5

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

83) Professor Wagner is explaining to his subjects the purpose behind the experiment they just participated in, along with a general description of the results. He is engaging in what aspect of a research study?

- A) Debriefing
- B) Informed consent
- C) Ethical considerations
- D) Experimenter bias

Diff: 1 Page Ref: 72-73

Learning Outcome: 2.5

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

84) In most experimental and correlational studies, the researcher is required to obtain the participant's _____.

Diff: 1 Page Ref: 72-73

Learning Outcome: 2.5

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

85) When debating the use of animals as research subjects, people often forget that research on animals

- A) must be ended as soon as is possible.
 - B) can lead to improvements in quality of life for animals as well as the researchers who used them as test subjects.
 - C) is a very simple issue, and only becomes problematic when one or more parties are not familiar with statistics.
 - D) does not always involve direct interaction between animal and researcher, for example, naturalistic observation.
- Diff: 3 Page Ref: 53
Learning Outcome: 2.6

86) What is the authors' position on the use of animal research in psychology?

- A) Animal research provides important insights but also comes with costs in terms of death and suffering of these subjects.
 - B) All animal research must be ended as soon as is possible.
 - C) It is more desirable to harm animals than to harm humans in the research process.
 - D) Results from animal research cannot inform us of how the same phenomenon occurs with humans.
- Diff: 2 Page Ref: 73-74
Learning Outcome: 2.6

87) The NHMRC has developed the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes. At the heart of the code are the three Rs of ethical animal experimentation:

- A) replacement, reduction, refinement.
 - B) reassurance, respect, restitution.
 - C) reimbursement, refinement, restitution.
 - D) respect, refinement, reduction.
- Diff: 3 Page Ref: 74
Learning Outcome: 2.6

ESSAY. Write your answer in the space provided or on a separate sheet of paper.

- 88) Explain why no single measure of central tendency and measure of dispersion exists that a researcher can use every single time.
- Diff: 2 Page Ref: 75
Learning Outcome: 2.7

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

89) A university president asks her psychology department chair if the university has more male or more female undergraduate psychology majors. What measure of central tendency is she asking about?

- A) Mean
- B) Median
- C) Mode
- D) Range

Diff: 1 Page Ref: 75
Learning Outcome: 2.7

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

- 90) If a statistician asks you, his assistant, to calculate the middle score from a data set, he is asking you to determine the value of the _____.
- Diff: 1 Page Ref: 75
Learning Outcome: 2.7

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

91) A British literature instructor examines the number of class periods his students have missed by mid-terms and has the following data: 1, 0, 10, 0, 2, 1, 0, 0, 5, 2, 3, 0, 0, 0, 1, 1, 2, 3, 1, 2. What is the median for this data set?

- A) 0
 - B) 1
 - C) 1.7
 - D) 2.5
- Diff: 1 Page Ref: 75
Learning Outcome: 2.7

92) Numerical characterisations that describe data are known as

- A) central tendencies.
 - B) inferential statistics.
 - C) dispersion.
 - D) descriptive statistics.
- Diff: 1 Page Ref: 75-76
Learning Outcome: 2.7

93) Which of the following is a measure of central tendency?

- A) Mode
 - B) Variability
 - C) Range
 - D) Standard deviation
- Diff: 1 Page Ref: 75-76
Learning Outcome: 2.7

94) In which situation would presenting the mean as one's measure of central tendency be *least* accurate?

- A) When the distribution is normally distributed
 - B) When the distribution is negatively skewed
 - C) When the distribution is bimodal
 - D) When there are many scores in the data set
- Diff: 1 Page Ref: 76
Learning Outcome: 2.7

95) This simplest measure of variability is the

- A) mean.
 - B) mode.
 - C) range.
 - D) standard deviation.
- Diff: 1 Page Ref: 76
Learning Outcome: 2.7

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

96) The preferred measure of variability in descriptive statistics is the _____.

- Diff: 1 Page Ref: 76
Learning Outcome: 2.7

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

97) The application of mathematics to describe and analyse data is known as

- A) dispersion.
- B) data reduction.
- C) statistics.

D) psychometrics

Diff: 1 Page Ref: 75-76

Learning Outcome: 2.8

98) Mathematical methods that allow us to determine whether we can generalise findings from our sample to the full population are called

A) central tendencies.

B) inferential statistics.

C) dispersion

D) descriptive statistics.

Diff: 1 Page Ref: 76

Learning Outcome: 2.8

99) A researcher wishes to generalise his findings beyond the people at the organisation he is studying in Queensland. He wants to attempt to show that the findings apply to all people who work in similar types of organisation throughout Australia. He should use _____ to analyse his data.

A) correlational statistics

B) descriptive statistics

C) inferential statistics

D) logical statistics

Diff: 3 Page Ref: 76

Learning Outcome: 2.8

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

100) Bauer (1992) argued that the scientific method is a myth because the techniques and strategies employed by scientists vary according to the _____ in which they are working.

Diff: 3 Page Ref: 52

Learning Outcome: 2.9

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

101) When data is positively skewed, the best measures of central tendency to report are the

A) mean or median.

B) median or mode.

C) mean and standard deviation.

D) mode and range.

Diff: 2 Page Ref: 76

Learning Outcome: 2.9

102) A major determinant of statistical significance is the

A) type of sample used.

B) size of the sample used.

C) type of analysis performed.

D) presence of practical significance.

Diff: 3 Page Ref: 77

Learning Outcome: 2.9

ESSAY. Write your answer in the space provided or on a separate sheet of paper.

103) Many advertising campaigns rely on statistics as a means to persuade people towards their point of view—be it to buy a new product, elect a given politician, or to increase market dominance. Why should consumers be wary of statistics used in advertising campaigns?

Diff: 2 Page Ref: 77-80

Learning Outcome: 2.9

104) Describe how the use of research protects us from incorrectly applying heuristics and cognitive biases.

Diff: 3 Page Ref: 52-70

Learning Outcome: 2.10

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

105) One important purpose of the peer-review process is to identify

- A) spelling and grammatical errors.
- B) flaws that could undermine a study's findings and conclusions.
- C) other researchers interested in the same field of study.
- D) the popularity of a given research area.

Diff: 2 Page Ref: 79

Learning Outcome: 2.10

106) Common flaws in research design identified by the authors of the text include

- A) failure to include a control group.
- B) manipulation of the independent variable.
- C) measurement of the dependent variable.
- D) failure to inform participants that they are going to receive a placebo.

Diff: 3 Page Ref: 79-80

Learning Outcome: 2.10

107) The peer review process is designed to

- A) block alternative therapies from being made available to the general public.
- B) identify flaws in a research study's methods, findings, and conclusions.
- C) make researchers feel bad when their article is not published.
- D) place obstacles in front of people whose theories differ from mainstream science.

Diff: 2 Page Ref: 80-81

Learning Outcome: 2.11

108) The "file drawer problem" refers to when

- A) researchers refuse to share their data with other researchers.
- B) too many studies on the same subject are published.
- C) an author writes too many articles on the same topic.
- D) studies with negative outcomes are not published.

Diff: 1 Page Ref: 80-81

Learning Outcome: 2.11

109) The general public is often misled by discussions of research in the media because

- A) most reporters are not fair and balanced in their reporting of the facts.
- B) most reporters are actively working to bias the public against scientific research.
- C) most reporters are not trained in understanding research or how to accurately communicate about it.
- D) most reporters are lazy and attempting to do as little as possible in their jobs.

Diff: 1 Page Ref: 79-80

Learning Outcome: 2.12

110) Professor Bowden is in the middle of her lecture on marital satisfaction when a student in the back interrupts her and

says, "Dr Phil doesn't agree with that theory!" Soon other students chime in to add fuel to the discussion. Professor Bowden just smiles and asks the original student to produce the research that Dr Phil carried out to justify his statements. What lesson is Professor Bowden trying to teach?

- A) Information from the media is always inaccurate.
- B) One should never question a well-established theory.
- C) Always check the source of your information before you believe it.
- D) Secondary sources are just as reliable as primary sources.

Diff: 3 Page Ref: 79-80

Learning Outcome: 2.12

111) A major limitation in reading about the results of psychological research in the newspaper is that

- A) reporters provide too much detailed information about the research study that the general public cannot comprehend in their articles.
- B) reporters are so well trained to discuss research that they cannot easily communicate about it with the average lay person.
- C) reporters create controversy where none exists by treating scientific evidence and dissenter's biased opinions as equally compelling.
- D) reporters do not know how to identify experts to interview for many of their stories and end up unintentionally misleading the public.

Diff: 3 Page Ref: 79-81

Learning Outcome: 2.12

112) A key factor to consider when reading about the results of a study on the internet, in a newspaper, or in a news magazine is to

- A) consider the source of the information.
- B) determine how well it fits with what others have told you in the past.
- C) rely on your commonsense or "gut" intuition.
- D) popular media outlets always have inaccurate information.

Diff: 3 Page Ref: 79-81

Learning Outcome: 2.12

ESSAY. Write your answer in the space provided or on a separate sheet of paper.

113) Illustrate why being an informed consumer about research, research designs, and statistics will be helpful in identifying incorrect statements about research in the media and on the internet.

Diff: 2 Page Ref: 79-81

Learning Outcome: 2.12

- 1) C
- 2) B
- 3) C
- 4) System 1
- 5) cognitive miser
- 6) B
- 7) A
- 8) availability heuristic
- 9) B
- 10) D
- 11) D
- 12) naturalistic observation
- 13) A
- 14) A
- 15) D
- 16) C
- 17) causation
- 18) make predictions (OR make predictions about future events OR describe and make predictions about behaviour)
- 19) illusory correlation
- 20) A
- 21) B
- 22) B
- 23) D
- 24) A
- 25) D
- 26) D
- 27) C
- 28) B
- 29) D
- 30) D
- 31) B
- 32) C
- 33) C
- 34) B
- 35) D
- 36) D
- 37) D
- 38) C
- 39) C
- 40) D
- 41) A
- 42) B
- 43) D
- 44) C
- 45) D
- 46) C
- 47) C
- 48) A
- 49) D
- 50) B
- 51) A
- 52) A

- 53) confounding
- 54) placebo (nocebo is also correct)
- 55) D
- 56) C
- 57) D
- 58) C
- 59) double-blind
- 60) D
- 61) D
- 62) B
- 63) C
- 64) D
- 65) Random selection
- 66) reliability
- 67) C
- 68) B
- 69) B
- 70) C
- 71) D
- 72) D
- 73) B
- 74) B
- 75) A
- 76) C
- 77) B
- 78) D
- 79) A
- 80) C
- 81) D

82) Answers will vary but should contain the following for full credit:

Human Research Ethics Committees (HRECs) exist to ensure that participants are protected against abuses from researchers. The members are drawn from different departments and must give their approval, and their concerns and any request for changes addressed, before research with human participants may begin.

The informed consent ensures that participants understand what is being asked of them and what will be involved in their experience. Participants must be given enough information to make a decision to voluntarily participate in the research. If they are misled during the research, the missing information must be explained during a debriefing.

- 83) A
- 84) informed consent
- 85) D
- 86) A
- 87) A

88) Answers will vary but should contain the following information for full credit:

Sometimes one measure is more appropriate than another. For example, the mean is distorted by the presence of outliers in a skewed distribution, so a researcher would be advised to report the median instead.

It depends what information a researcher wants to highlight. For example, if a researcher wants to identify what was the most frequently endorsed option for a question, he or she would choose the mode. If he or she wants to report about how the scores were represented over all the possible answers he or she would report the mean.

A researcher cannot just report central tendency or just dispersion because it tells only part of the whole, either where scores are located (central tendency) or how much difference between scores is present (dispersion).

Some people may wish to know the typical difference between scores and thus choose standard deviation, while others would look at the amount of difference from the most extreme scores and choose the range.

- 89) C

90) median

91) B

92) D

93) A

94) B

95) C

96) standard deviation

97) C

98) B

99) C

100) discipline

101) B

102) B

103) Answers will vary but should contain the following information for full credit:

Reporting mean scores when working with skewed data, which gives an unrepresentative picture (for example, may result in artificially inflating the perceived effectiveness of a treatment).

Using truncated graphs to perceptually exaggerate perceived gains, or elongated graphs to minimise perceived losses associated with the campaign (for example, using increments of 50 on the y-axis of a graph so that the expected increases to cost of living associated "look" smaller).

104) Answers will vary but should contain the following information for full credit.

Student should mention that research requires that we make our predictions beforehand so that the hindsight bias does not lead us to exaggerate our ability to correctly understand a complex world.

The researchers use techniques that focus on recording or gathering information so that our institutions are not allowed to bias the results (avoiding illusory correlations as well as availability and representativeness heuristics).

Designs themselves have limitations so that further research is needed to establish the reliability and validity of our findings.

105) B

106) A

107) B

108) D

109) C

110) C

111) C

112) A

113) Answers will vary but should contain the following, and include the first idea, to gain full credit:

Student should mention that understanding research designs will aid in identifying when statements of cause and effect are appropriate and when they are not (need to give supportive evidence for this and all statements to see that they truly demonstrate an understanding of each idea).

One will recognise misleading or inaccurate statistical statements.

One will recognise when headlines are inaccurate summaries of the research results.

One will recognise when reports or writers have used sharpening and levelling.

One will consider the source and whether the story coverage is balanced or whether it muddles the discussion.