

CHAPTER 2

PSYCHOLOGY AS A SCIENCE

CHAPTER LEARNING OBJECTIVES

1. **List two core beliefs of science, and describe the steps in the scientific method.**

- Science is an approach to knowing the world built on the core principles that (1) the universe operates according to certain natural laws, and (2) these laws are discoverable and testable.
- Science is founded upon the scientific method, a process that moves from making controlled, direct observations to generating progressively broader conclusions and tests and attempting to disprove hypotheses.

2. **Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.**

- Psychology shares with every science the primary goals of describing, explaining, predicting, and controlling the objects of study. The goals of psychology differ from those of other sciences because the search for elements of mental processes and behaviour is complicated by constantly shifting human factors.
- Psychology also shares more similarity with the fields of religion and philosophy than many sciences do because psychological findings are more often associated with values, morality, and personal preference.
- Psychology is different from pseudopsychology. Although the latter also attempts to answer fundamental questions about human nature and behaviour, it has no basis in the scientific method.

3. **List steps in the research process and key characteristics of descriptive and experimental psychological research methods.**

- Psychological research is rooted in first generating a hypothesis, or prediction, about the relationship between two or more variables based on observations.
- Psychologists conduct research with a sample, a small group meant to represent the larger population of interest. The best means of selecting a sample is random selection, a procedure in which everyone in the population has an equal chance of being selected to be in the sample.
- Descriptive research methods include case studies, naturalistic observations, and surveys.
- Case studies are in-depth observations of a single individual.
- Naturalistic observation involves observing people in settings outside of laboratories where their behaviour occurs naturally.
- Surveys may be conducted in interviews or with questionnaires.
- Only experiments allow researchers to draw conclusions about cause-and-effect relationships.
- All research methods have advantages for particular uses and all are subject to various drawbacks. Researchers must plan carefully to avoid subject bias, researcher bias, and demand characteristics.

4. Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

- Correlations allow us to describe and measure relationships between two or more variables. A *correlation coefficient* tells the direction and size of a correlation.
- Researchers use the mean and standard deviation to describe and summarize their results.
- Researchers use *p values* to determine the statistical significance of results. *Effect size* tells how strong the relationship is between variables.
- Replication of experiments and repeated study of the same predictions using different methods help hypotheses become theories.

5. Describe what ethical steps psychologists take to protect the rights of human research participants.

- Today, oversight boards called research ethics boards (REBs) help to protect human rights.
- Psychological researchers must obtain informed consent from human participants, protect them from harm and discomfort, protect their confidentiality, and completely debrief them at the end of their participation.
- The use of animal participants in research has also raised ethical concerns. An oversight council called the Canadian Council on Animal Care (CCAC) works to protect animals' needs and comfort in experiments.

MULTIPLE CHOICE QUESTIONS

1. A given field of study is defined as a science by its
- a) methods.
 - b) equipment.
 - c) subject matter.
 - d) findings.

Answer: a

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

2. All sciences, including psychology, are built on the core belief that
- a) the natural laws of the universe are discoverable and testable.
 - b) the universe provides clues to what we can learn about.
 - c) reliance on natural observation is a necessary first step.
 - d) the laws of nature are mysterious and untestable.

Answer: a

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

3. Which of the following is not a common factor between psychology and the physical sciences?
- a) The belief that universe operates according to certain natural laws.
 - b) The belief that natural laws are discoverable and testable.
 - c) The goals of describe, explain, predict, and control.
 - d) The attempt to isolate the contribution of influencing factors and think about how the factors come together across different situations.

Answer: d

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

4. Cecilia is using the formula $F = M \cdot A$ to solve a physics problem. Cecilia is using ____ reasoning.

- a) hypothetico-deductive
- b) empirical
- c) inductive
- d) deductive

Answer: d

Difficulty: Medium

Bloomcode: Application

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

5. The Greek philosophers used a type of reasoning known as ____ reasoning.

- a) deductive
- b) hypothetico-deductive
- c) Socratic
- d) inductive

Answer: a

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

6. The reasoning known as ____ reasoning is used in science to form theories and hypotheses. However, ____ reasoning can lead to false conclusions. For example, if we said, "My auntie has red hair. Therefore, all auntie's have red hair," we are using ____ reasoning but have formed a false conclusion.

- a) empirical
- b) deductive
- c) inductive
- d) hypothetico-deductive

Answer: c

Difficulty: Medium

Bloomcode: Application

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

7. Recall your text's discussion of the behaviourist perspective in Chapter 1. According to your text, "Skinner argued [that] empirical – observable – information should be gathered first, and

then theories . . . could be formulated from that.” Skinner is endorsing ____ reasoning, promoted early on by ____.

- a) inductive; Bacon
- b) inductive; Descartes
- c) deductive; Bacon
- d) deductive; Descartes

Answer: a

Difficulty: Hard

Bloomcode: Evaluation

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

8. Which of the following is a flaw associated with inductive reasoning?

- a) Inductive reasoning is too susceptible to the biases of individual psychologists.
- b) Inductive reasoning is based on subjective observation.
- c) Induction cannot discover all the factors affecting human behaviour.
- d) Inductive reasoning has never been a key part of scientific research.

Answer: c

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

9. Why is inductive reasoning less susceptible to bias than deductive reasoning?

- a) Inductive reasoning begins with a general theory rather than specific observations.
- b) In inductive reasoning, the observations that would refute the theory are specified in advance.
- c) Inductive reasoning begins with objective observations rather than a theory in the reasoner's mind.
- d) Inductive reasoning is essentially the opposite of the sort of deductive reasoning that philosophers used.

Answer: c

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

10. Cory is carrying out a research project using a blended model known as _____. This means that Cory will begin by reviewing previous research, will then identify a broad topic, and then will design his own study, developing a specific hypothesis to address a specific research

prediction.

- a) deductive reasoning.
- b) inductive reasoning.
- c) hypothetico-deductive reasoning.
- d) empirical reasoning.

Answer: c

Difficulty: Medium

Bloomcode: Application

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

11. Walker's computer will not turn on. Walker hypothesizes that the computer was accidentally unplugged when he moved the computer desk. He then checks to see if the computer is plugged in. Which type of reasoning did Walker use to fix his computer?

- a) inductive
- b) deductive
- c) hypothetico-inductive
- d) hypothetico-deductive

Answer: d

Difficulty: Medium

Bloomcode: Application

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

12. Most psychologists today use a type of reasoning termed ____ reasoning.

- a) theoretico-inductive
- b) theoretico-deductive
- c) hypothetico-inductive
- d) hypothetico-deductive

Answer: d

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

13. When Emma is driving to work her car suddenly stalls. Her first thought is that she has run out of gas, so she checks the fuel gauge. Which type of reasoning is Dawn using to solve her car problem?

- a) deductive
- b) inductive
- c) hypothetico-deductive
- d) hypothetico-inductive

Answer: c

Difficulty: Medium

Bloomcode: Application

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

14. Charlie's dog, Alistair, is sick. Charlie recalls that Alistair was digging around the alley near the garbage earlier in the day and thinks he might have eaten something rotten. So, she gives Alistair a remedy she has used in the past and waits to see whether he gets better. Which of the following alternatives CORRECTLY identifies the order in which Charlie followed the goals of science, as matched to a given type of reasoning?

- a) deductive reasoning: observation – prediction – explanation
- b) hypothetico-deductive reasoning: prediction – observation – explanation
- c) hypothetico-deductive reasoning: observation – prediction – explanation
- d) inductive reasoning: explanation – prediction – observation

Answer: b

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

15. Darius' cell phone will not turn on. If Darius were to use hypothetico-deductive reasoning to try to solve his cell phone problem. Which of the following would describe the order of steps he might take?

- a) Hypothesize that the phone's battery might need to be charged, charge the phone's battery, and then try to turn it on.
- b) Keep trying to turn the phone on and then decide the battery most likely needs to be charged.
- c) He would then charge the battery and try to turn the phone on.
- d) He would search the internet for reasons why the phone might not turn on and then charge the battery and try to turn the phone on.

Answer: a

Difficulty: Medium

Bloomcode: Application

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

16. What British philosopher argued for _____ reasoning? He maintained that this type of reasoning was superior because an approach leading from specific facts to general ideas avoids bias.

- a) hypothetico-deductive; Skinner
- b) deductive; Popper
- c) indicative; Kant
- d) inductive; Bacon

Answer: d

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

17. The well known philosopher, Karl Popper, argued that statements and theories that are not falsifiable are not scientific. What type of reasoning did he suggest be used to accomplish this end?

- a) deductive reasoning
- b) hypothetico-deductive reasoning
- c) inductive reasoning
- d) Cartesian mechanics

Answer: b

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

18. Berta is convinced that the birds in her area are laying eggs that are less hard-shelled since a new industrial plant was built and has been polluting the nearby waterways. She is gathering evidence to make her case by obtaining eggshells from before the plant was built for the purpose of comparison. Berta is engaging in the _____ reasoning process.

- a) reductive
- b) deductive
- c) inductive
- d) hypothetico-deductive

Answer: d

Difficulty: Medium

Bloomcode: Application

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

19. What stage of the scientific method will someone be at if they make a prediction that drinking alcohol will make people more violent during a sporting event?

- a) developing a theory
- b) forming a testable hypothesis
- c) designing a study
- d) reviewing the literature of existing theories

Answer: b

Difficulty: Medium

Bloomcode: Application

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

20. The universe operates according to certain natural laws and these laws are discoverable and testable. These beliefs about the world form the foundation of _____.

- a) nature
- b) consciousness
- c) science
- d) astrology

Answer: c

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

21. Which of the following is true about the laws of science?

- a) They can be used to make predictions and conduct experiments to see if the predictions are true.
- b) They guide the decision regarding which disciplines are considered sciences.
- c) They are the same as theories.
- d) The scientific method cannot be used to test them.

Answer: d

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

22. The scientific approach involves all of the following EXCEPT

- a) making observations
- b) developing hypotheses
- c) testing hypotheses
- d) deciding on causation

Answer: d

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

23. Ideas about laws that govern phenomena are called

- a) scientific theories.
- b) phrenology.
- c) pseudo-psychology.
- d) hypotheses.

Answer: a

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

24. Kaloni has observed that first year university students who live in the dormitories seem to have more friends than those who live off-campus. Based on the scientific approach, what would Kaloni's next step be if she wanted to conduct a research study to examine this topic?

- a) develop a hypothesis
- b) test the hypothesis
- c) adjust the theory
- d) build a theory

Answer: a

Difficulty: Medium

Bloomcode: Application

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

25. A hypothesis is defined as

- a) a process that is independent of a theoretical framework
- b) any statement regarding the relationship of variables
- c) a systematic way of explaining observations that is subjectively falsifiable
- d) a statement about how variables relate that is objectively falsifiable

Answer: d

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

26. Sergio is conducting a research study using human subjects to find out how people learn to “think outside the box”. He expects that people who given more restrictions will not think outside the box as well as those who are given fewer restrictions. Which of the following best describes this expectation?

- a) a hypothesis
- b) an operational definition
- c) a meta-analysis
- d) a statistically significant result

Answer: a

Difficulty: Medium

Bloomcode: Application

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

27. “Children who read for twenty minutes per day are more likely than children who don’t read to score high on standardized tests”. This statement is an example of a

- a) hypothesis.
- b) theory.
- c) testimony.
- d) variable.

Answer: a

Difficulty: Medium

Bloomcode: Application

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

28. Which of the following statements illustrates a testable hypothesis?

- a) Retired couples are more likely than non-retired couples to report greater marital satisfaction.
- b) Retired people typically miss working at their jobs.
- c) Men who retire tend to decline within the first year of retirement.
- d) Most retirees enjoy life, especially if they have grandchildren.

Answer: a

Difficulty: Medium

Bloomcode: Application

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

29. Dr. Fernelli is using the scientific method to investigate Freud's concepts about the unconscious as a strong determiner of behaviour. Specifically, she predicts that people who have more unconscious aggressive urges will act more aggressively than people with fewer unconscious aggressive urges. What is the biggest problem that Dr. Fernelli is overlooking in her research?

- a) Her hypothesis is not falsifiable.
- b) Her prediction is biased.
- c) She is not following the steps of the scientific method.
- d) She is studying a topic that is out-dated.

Answer: a

Difficulty: Medium

Bloomcode: Application

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

30. Which of the following would most accurately describe the relationship between hypotheses and theories?

- a) Hypotheses are the same as theories.
- b) Hypotheses relate to minor research issues, and theories relate to important research issues.
- c) Hypotheses that are supported lead to theories.
- d) Theories are general statements about how variables relate, and theories are ideas about laws that govern phenomena.

Answer: c

Difficulty: Medium

Bloomcode: Application

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

31. A researcher performs a previous study following the same procedures as the previous researcher to see if she will get the same results. This is an example of _____.

- a) an invalid research method
- b) a replication of studies
- c) plagiarism
- d) a descriptive technique

Answer: b

Difficulty: Medium

Bloomcode: Application

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

32. Jordan decides that she has low confidence in a single scientific study showing video game playing leads to violence. Her confidence in this study's findings could be increased through the process of

- a) replication.
- b) association.
- c) sublimation.
- d) termination.

Answer: a

Difficulty: Medium

Bloomcode: Application

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

33. Psychology bases their research findings on objectively testable observations. Therefore, it can be said that psychological research is _____.

- a) deductive
- b) inductive
- c) hypothetical
- d) empirical

Answer: d

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

34. Which of the following did NOT exert influence on psychology prior to the 19th century?

- a) Philosophy
- b) Religion
- c) Mysticism
- d) Physiology

Answer: d

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

35. In which century did physiology first begin to influence psychology?

- a) 16th
- b) 17th
- c) 18th
- d) 19th

Answer: d

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

36. Which of the following has NOT been credited for shifting psychology from a philosophy toward becoming a science?

- a) scientists' ability to tie innate biological functions to human actions
- b) Darwin's theories of evolution
- c) advances in the field of biology
- d) the suggestion of Immanuel Kant that psychology is empirical in its study of consciousness.

Answer: d

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

37. Which of the following is the BEST example of psychology's goal of describing behavior?

- a) giving an interest-inventory (test) at a college counseling center to determine what career or college choices would best suit a student
- b) conducting an experiment to determine if watching violent cartoons increases aggressive behavior in preschoolers
- c) videotaping an intersection with four-way stop signs and measuring the ratio of complete to incomplete stops made by drivers
- d) sending first-time drug offenders to an inpatient treatment program rather than to jail

Answer: c

Difficulty: Medium

Bloomcode: Application

Learning Objective: Compare and contrast psychology with other natural sciences, such as

biology, chemistry, and physics, and with pseudosciences, such as astrology.
Section Reference: Is Psychology a Science?

38. Based on Immanuel Kant's suggestion about psychology's potential as a "real" science, which of the following persons would he most likely support?

- a) Edward Titchener
- b) William James
- c) Gustav Fechner
- d) Carl Rogers

Answer: c

Difficulty: Hard

Bloomcode: Synthesis

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

39. If you were to develop a list of names of researchers who demonstrated Immanuel Kant's criteria for psychology being a science, which of the following would you NOT include?

- a) Gustav Fechner
- b) B. F. Skinner
- c) John Watson
- d) William James

Answer: d

Difficulty: Hard

Bloomcode: Synthesis

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

40. Dr. Ari's discipline attempts to provide society with useful information that has practical applications. Dr. Lynetti's discipline has the goals of describing, explaining, predicting, and controlling the phenomena being studied. Based on this, which of the following most accurately matches Dr. Ari and Dr. Lynetti with their respective disciplines?

- a) Dr. Ari – psychology; Dr. Lynetti – a physical science
- b) Dr. Ari – psychology; Dr. Lynetti – psychology
- c) Dr. Ari – a physical science; Dr. Lynetti – a physical science
- d) Dr. Ari – psychology or a physical science; Dr. Lynetti – psychology or a physical science

Answer: d

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

41. Which of the following is the BEST example of psychology's goal of changing behavior?

- a) conducting research into the likelihood that convicted felons will reoffend once released from prison
- b) exploring the function of cutting behavior in a teenager's life so that the teenager can understand his options and make choices regarding the behavior.
- c) giving an interest-inventory (test) at a college counseling center to determine what career or college choices would best suit a student
- d) videotaping an intersection with four-way stop signs and measuring the ratio of complete to incomplete stops made by drivers

Answer: b

Difficulty: Medium

Bloomcode: Application

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

42. Which of the following examples shows how psychology can overcome the problem that mental functions cannot be directly observed?

- a) Anne records how far one can jump as a measure of athleticism.
- b) Dan examines how high he can count in his head before his thoughts wander to something else.
- c) Stan measures how long he can hold his hand over a candle flame before he has to pull it away.
- d) Fran counts the number of words she can remember from a list as a measure of memory capacity.

Answer: d

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

43. Which field is given credit for shifting the field of psychology away from philosophy toward becoming a science?

- a) religion
- b) pseudopsychology
- c) biological science
- d) eugenics

Answer: c

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

44. In which year did Alberta disband its eugenics board?

- a) 1927
- b) 1959
- c) 1972
- d) 1994

Answer: c

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

45. Which of the following is accurate regarding the current practice of eugenics in Canada?

- a) It is widely practiced in Canada.
- b) It is no longer practiced in Canada.
- c) It is practiced in a few provinces in Canada.
- d) It is seeing a resurgence in practice due to advances in genetic research.

Answer: b

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

46. Pedro is writing a book about a society that is selecting couples to reproduce based on their characteristics of beauty. In this society, only those deemed to be the most beautiful can have children, while those who are less beautiful are given a pill to make them infertile. The plot of Pedro's book describes the field known as

- a) behavioural genetics.
- b) genetic counselling.
- c) eugenics.
- d) selective fertilization.

Answer: c

Difficulty: Medium

Bloomcode: Application

Learning Objective: Compare and contrast psychology with other natural sciences, such as

biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

47. Siobhan has been pursuing the policy statements on the Canadian Psychological website. She was horrified to discover the intersection of sciences that lead to eugenics. Which of the following statements regarding eugenics is NOT accurate?

- a) Eugenics is associated with racism and homophobia.
- b) The field of genetic research, with its interdisciplinary focus, has overcome concerns and debate regarding ethical issues.
- c) Biological scientists developed methods for selective breeding to develop sturdier livestock. A subset of geneticists and other scientists applied these principles to human reproduction.
- d) Those in the field of eugenics discouraged/forced those they deemed undesirable from passing on their genetic traits.

Answer: b

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

48. Which of the following is an example of pseudopsychology?

- a) astronomy
- b) astrology
- c) mindfulness
- d) meditation

Answer: b

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

49. Which pseudoscience uses Zodiac signs to predict the future and provide advice about relationships?

- a) astrology
- b) astronomy
- c) conversion therapy
- d) meditation

Answer: a

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

50. Another term for pseudopsychology is

- a) witchcraft.
- b) pop psychology.
- c) quack psychology.
- d) pseudocounselling.

Answer: b

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

51. How is psychology different from pseudopsychology?

- a) Psychology tries to help people; pseudopsychology doesn't.
- b) Pseudopsychology is based on Freud's work; psychology is any work that looks at mental processes.
- c) Psychology focuses on research and experiments; pseudopsychology focuses on the application of this knowledge.
- d) Psychology is based on the scientific method; pseudopsychology isn't.

Answer: d

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

52. With which of psychology's shared values are pseudosciences such as astrology MOST inconsistent?

- a) Psychology is empirical.
- b) Psychology is multilevel.
- c) Psychology is theory-driven.
- d) Psychology is contextual.

Answer: a

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

53. Which of the following statements best expresses the relationship between psychology and such natural sciences as biology?

- a) Psychology is the same as any other natural science.
- b) Psychology pursues different goals and uses different methods than do such natural sciences as biology.
- c) Psychology is unlikely ever to become a true natural science.
- d) Psychology differs in some ways from the other natural sciences.

Answer: d

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

54. Which of the following alternatives accurately states a key difference between psychology and the other sciences?

- a) Psychology is less concerned with practical applications than are some of the other sciences.
- b) Psychology is more likely to deal with “morally loaded” issues than are the other sciences.
- c) Psychology is more concerned with the goal of control than are the other sciences.
- d) Psychology is less interested in building theories than are the other sciences.

Answer: b

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

55. Psychology's goal of prediction is met through _____ studies; whereas psychology's goal of explanation is met through _____ studies.

- a) correlational; experimental
- b) applied; basic
- c) qualitative; quantitative
- d) theoretical; empirical

Answer: a

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

56. Which of the following best describes Immanuel Kant's suggestion regarding psychology as a "real" science.

- a) He believed that psychology was close to a real science in areas of sensations and consciousness.
- b) He did not believe that psychology could be a real science until it became more empirical.
- c) He believed that psychology was based solely on observable behaviours and should therefore be considered a science.
- d) He believed that psychology was close to becoming a real science in areas of behaviours, sensations, and physiological responses.

Answer: d

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

57. According to your text, which scientific goal seems to pose a particular challenge for psychology?

- a) description
- b) prediction
- c) explanation
- d) control

Answer: a

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

58. Psychology's attributes compare with that of the physical sciences in several ways. Of the attributes listed below, which ones express important ways in which psychology differs from the physical sciences?

- 1 – how it pursues scientific goals
 - 2 – it uses experimental methods
 - 3 – its role in influencing personal and social values
 - 4 – it attempts to isolate fundamental elements
- a) 1 & 4
 - b) 2 & 3
 - c) 1 & 3
 - d) 2 & 4

Answer: c

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

59. Which of the following examples shows how psychology differs from other sciences in that applying psychological findings entails issues associated with values and morality?

- a) Alejandro makes sure that he eats a good meal before his final exam because he read that the nutrients will help his brain function better.
- b) Mariam decides to use time outs with her children as opposed to spanking them because she read that physical punishment increases aggression in children.
- c) Dr. Maury is investigating the factors that contribute to weight loss.
- d) Dory is a Virgo and as such she is very balanced and mild tempered.

Answer: b

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

60. Why do many psychologists find current advances in brain imaging especially exciting, considering your text's discussion of the goals of psychology at the beginning of Chapter 2?

- a) These advances promise to expand the realm of that which is directly observable.
- b) These advances offer indirect ways to observe the mind.
- c) These advances validate the notion that psychology should limit itself to directly observable phenomena.
- d) These advances indicate that difficulties in observation do not necessary impede progress toward the goal of explanation.

Answer: a

Difficulty: Hard

Bloomcode: Evaluation

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

61. Why is psychology so often misrepresented and misapplied?

- a) It is highly relevant to people's lives.
- b) It has made little real progress in understanding thought and behaviour.
- c) It focuses on unobservable phenomena.
- d) As a discipline, it has been hijacked by pseudopsychologists.

Answer: a

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

62. Harvard psychologist Steven Pinker argues that language is instinctual among human beings. Which of the following eminent psychologists of the past would be LEAST willing to entertain Pinker's claim?

- a) Abraham Maslow
- b) Roger Sperry
- c) Ulrich Neisser
- d) B. F. Skinner

Answer: d

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

63. About how many of psychology's "celebrity practitioners" are legitimate?

- a) none
- b) only a minority
- c) about half
- d) a majority

Answer: b

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: Compare and contrast psychology with other natural sciences, such as biology, chemistry, and physics, and with pseudosciences, such as astrology.

Section Reference: Is Psychology a Science?

64. The BEST definition of an independent variable is a variable that _____.

- a) is a measurable behavior exhibited by a participant and affected by the dependent variable
- b) is manipulated by the experimenter to determine its causal effect on the dependent variable
- c) is kept constant during an experiment to prevent contamination of other variables
- d) cannot be manipulated by anyone

Answer: b

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

65. Antonella is conducting research looking at the effects of drinking alcohol on memory. She has participants study a list of words and has them perform a memory test to recall the words after drinking 1, 3, 5, and 7 alcoholic beverages. In Antonella's study, the number of alcoholic beverages consumed, and the number of words recalled would be

- a) independent variables.
- b) dependent variables.
- c) controlling variables.
- d) variables.

Answer: d

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

66. A condition, event or situation that is studied in an experiment is called a

- a) factor variable.
- b) independent factor.
- c) dependent factor.
- d) variable.

Answer: d

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

67. _____ variables are manipulated by researchers; _____ variables are measured.

- a) Dependent; independent
- b) Surveys; experimental
- c) Experimental; control
- d) Independent; dependent

Answer: d

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

68. Jada proposes that the more impulsive a student is, the less likely he or she will be to change answers on a multiple-choice test. The variable(s) in this statement is/are

- a) impulsivity.
- b) answer-changing.
- c) both impulsivity and answer-changing.
- d) the student, impulsivity, and answer-changing.

Answer: c

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

69. The BEST definition of a dependent variable is a variable is:

- a) a measurable behavior that is affected by the independent variable
- b) controlled by the experimenter and applied to the participant to determine its effect
- c) kept constant during an experiment to prevent contamination of other variables
- d) is the experimental group in the study

Answer: a

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

70. Joaquin is interested in whether the level of light (bright, moderate, low) effects worker productivity on an assembly line. He also wants to know if the type of light (fluorescent, yellow, or sunlight) makes a difference. Across three weeks, he adjusts the type and level of light in the factory and measures the number of items produced as well as the number of mistakes they made on the assembly line during each type and level of lighting. In Joaquin's study, the number of items produced would be a(n) _____ variable and the number of errors made would be a(n) _____ variable.

- a) independent; dependent
- b) dependent; independent
- c) dependent; dependent
- d) independent; independent

Answer: c

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

71. Dr. Diaz is studying the effect of the colour of classroom walls on student memory. She has four groups of students memorize three lists of words in different classrooms. One classroom

has blue walls, one has yellow walls, one has green walls, and the last has white walls. After studying the words, Dr. Diaz has the students from all four groups write down as many words as they can recall. In this study, the independent variable(s) is/are the _____.

- a) colour of the wall
- b) number of groups of students, and colour of the walls
- c) number of groups of students, and the number of lists of words, and the number of words recalled
- d) colour of the walls, and the number of words recalled

Answer: a

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

72. Xian studied the impact of a new medication on reducing depressive symptoms in patients who had not responded to other forms of treatment. All participants in Xian's study were diagnosed with major depressive disorder. Xian divided the participants into three groups, with each group taking a different drug and with no participant aware of the specific drug they were taking. One group took a standard SSRI drug, one group took a standard SNRI drug, and the third group took the new drug. Xian measured the depressive symptoms of the participants over a six month period. In this study, the type of drug participants took would be the _____ variable and number and severity of depressive symptoms would be the _____ variable.

- a) independent; dependent
- b) dependent; independent
- c) dependent; dependent
- d) independent; independent

Answer: a

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

73. When asked to define 'popularity,' Abena offers, "It's when everyone likes you." Chrissy suggests, "It's basically the number of friends you have." In this example, an operational definition is being offered by

- a) both Chrissy and Abena.
- b) neither Chrissy nor Abena.
- c) Abena.
- d) Chrissy.

Answer: d

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

74. Imagine you have developed the hypothesis, "Children living in poverty are at risk for school truancy". Which is the BEST operational definition for truancy?

- a) school attendance records that report at least seven unexcused and consecutive absences
- b) school grades that decrease by one letter grade for at least two classes
- c) children who receive public assistance
- d) children who reside in a household that earns below the poverty rate

Answer: a

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

75. Each of the following is an operational definition of 'happiness' EXCEPT

- a) a feeling of joy or contentment.
- b) the number of times a given individual smiles in an hour.
- c) an individual's self-rating on a 10-point happiness scale.
- d) a diffuse pattern of brain activation associated in past research with positive emotion.

Answer: a

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

76. Generating a prediction is ____ conducting an experiment.

- a) step 1
- b) step 2
- c) step 3
- d) step 4

Answer: b

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

77. The group of people that participate in an experiment is called a _____. The group of people that do not participate but to which the findings will be applied are called a _____.

- a) experimental group; control group
- b) sample; population
- c) population; sample
- d) sample; sample

Answer: b

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

78. Dr. Fallon wishes to study the effect of an intervention program on children in grade 6 who have ADHD. In this study all children in grade 6 would be the ____ whereas children with ADHD in grade 6 would be the ____.

- a) independent variable; dependent variable
- b) sample; population
- c) population; sample
- d) dependent variable; independent variable

Answer: c

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

79. _____ is to a single experiment, as _____ is to all the people to which the study findings will be generalized.

- a) Sample; participant
- b) Participant; sample
- c) Participant; population
- d) Sample; population

Answer: d

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

80. A sample is BEST defined as _____.

- a) a group of participants in a study who have sampled the treatment condition
- b) a selected group of participants that is representative of a larger population
- c) the total of all possible cases from which a population is selected
- d) a group of participants in a study that is atypical of the larger population

Answer: b

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

81. In a study on student conformity, researchers selected a group of college students who appeared to represent the characteristics of students from the entire college campus. The selected group served as the _____ of the college _____.

- a) representatives; campus
- b) population; representatives
- c) sample; population
- d) representatives; sample

Answer: c

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

82. Dr. Lòpez is a researcher who studies the relationship between drinking and driving by measuring blood alcohol level and the number of driving errors that occur in a driving simulator. In this example, what is blood alcohol level?

- a) an independent variable
- b) a dependent variable
- c) a covariant
- d) operational definition

Answer: d

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

83. Quentin and Galen are both working together on a research project examining academic

dishonesty among university students. They each interview 50 students in a private room. Quentin asks the students he interviews if they have ever cheated on a test or exam. Galen asks the students he interviews if they have ever plagiarized on a term paper. When Galen and Quentin bring the results of their interview together, what is the most likely finding of the study?

- a) Quentin will find that more of the students he interviewed will report having committed academic dishonesty.
- b) Galen will find that more of the students he interviewed will report having committed academic dishonesty.
- c) The two researchers will report similar results.
- d) The results will be meaningless as the two researchers were working with different operational definitions.

Answer: d

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

84. To study the effects of sugar intake on attention deficit/hyperactivity disorder, Sheng strictly measures participant's caloric and sugar intake and confirms effects by measuring glucose levels in the bloodstream. Sheng then measures levels of behavioural activity. For this study Sheng has _____ "effect of sugar."

- a) operationalized
- b) statistically defined
- c) created a parameter for
- d) quantified

Answer: a

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

85. When participants in a study are recruited in such a way that everyone in the population of interest has an equal chance of being involved in the study, it is called

- a) random assignment.
- b) random selection.
- c) selection bias.
- d) random sampling.

Answer: b

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: List steps in the research process and key characteristics of descriptive and

experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

86. To make sure that everyone in a sample has an equal chance of being in either the control or experimental group, researchers typically use

- a) random selection.
- b) random assignment.
- c) sampling bias.
- d) sampling selection.

Answer: b

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

87. All of the following are representative samples EXCEPT which?

- a) Amir contacted any student with either a “23” or a “56” in their 9 digit ID code to ask them to complete a questionnaire on student mental health issues.
- b) Matilda asked all the women in her prenatal group to fill out a questionnaire regarding male attitudes about pregnancy.
- c) Esme went to a hockey camp and asked every third boy or girl there to fill out a questionnaire regarding recreational sports and aggression.
- d) Dhruv went to a school to assess their school culture. He went from classroom to classroom flipping a coin and only asking those who got “heads” to participate.

Answer: b

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

88. What are the two primary types of research methods?

- a) descriptive and experimental
- b) sample and population
- c) naturalistic observation and surveys
- d) correlational and double-blind experiments

Answer: a

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

89. Which of the following is a research method in which researchers directly observe people in a study behaving as they normally do?

- a) case study
- b) survey
- c) naturalistic observation
- d) experiment

Answer: c

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

90. Ruby is conducting a study examining the sharing behaviours among 3-year old children. For three weeks she sits in the corner of a day care center and records the sharing behaviours of the children. Ruby is conducting a(n) _____.

- a) case study
- b) naturalistic observation study
- c) experimental study
- d) environmental observation

Answer: b

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

91. Naturalistic observation entails

- a) the systematic, detailed study of a single individual.
- b) examining existing records, such as census documents.
- c) asking a sample of different individuals, a set of questions.
- d) examining behaviour in the setting in which it typically occurs.

Answer: d

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

92. DeAndre is recording instances of physical aggression among children in a schoolyard at recess. DeAndre is undertaking

- a) naturalistic observation.
- b) experimental research.
- c) survey research.
- d) a case study.

Answer: a

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

93. The main advantage of naturalistic observation is that it _____.

- a) eliminates extraneous variables
- b) allows researchers to obtain data about natural behavior
- c) is less time consuming and expensive than other research methods
- d) can determine cause and effect

Answer: b

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

94. _____ research observes and records behaviors without manipulating variables or producing causal explanations.

- a) Descriptive
- b) Empirical
- c) Independent
- d) Dependent

Answer: a

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

95. In _____ research, a researcher observes or measures (without manipulating) two or more variables to determine whether or not there is a relationship between them. This kind of research does not allow one to draw conclusions about a cause-and-effect relationship.

- a) experimental

- b) correlational
- c) archival
- d) applied

Answer: b

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

96. Dr. Drucker plans to study the relationship between drug abuse and minor illnesses such as colds and flu. Why might he be most likely to use a descriptive research method?

- a) Descriptive studies will allow him to draw conclusions about cause and effect.
- b) There is little concern about participant or researcher biases.
- c) He would have greater control over the variable of drug abuse.
- d) It would be unethical to manipulate the variable of drug abuse.

Answer: d

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

97. Which of the following is NOT an example of a descriptive research study?

- a) Dr. Chou is studying the effects of brain injury on the working memory of an 18-year old man.
- b) Dr. Lang is conducting a survey on undergraduate attitudes toward the legalization of marijuana.
- c) Dr. Credence is measuring aggression on the playground by directly observing children playing on the playground.
- d) Dr. Davis is studying how quickly students react to vocal instructions when they are listening to music and when they are reading in a quiet room.

Answer: d

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

98. Daniel has designed a study where he plans to control the independent variable and to randomly assign participants to group. Which type of study is Daniel going to do?

- a) experimental
- b) correlational

- c) descriptive
- d) observational

Answer: a

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

99. Conclusions about cause-and-effect relationships can only be drawn from _____ studies.
- a) experimental
 - b) descriptive
 - c) correlational
 - d) case

Answer: a

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

100. Which of the following is NOT an accurate statement about surveys?
- a) They can be unreliable because people respond in socially acceptable ways.
 - b) They allow researchers to collect information they might not be able to use with other research methods.
 - c) They cannot tell us the direction of a relationship.
 - d) They allow researchers to look at interaction effects.

Answer: d

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

101. Olson has handed out questionnaires to his participants to find out whether sexual attitudes are influenced by the number of years of education a person has. Olson most likely used a(n) _____ method.
- a) naturalistic observation
 - b) case study
 - c) interview
 - d) survey

Answer: d

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

102. What type of information about variables can a survey provide without the use of statistical analysis of the information collected?

- a) strength
- b) direction
- c) if a relationship exists
- d) no information

Answer: c

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

103. Which of the following research methods involves giving participants a questionnaire or interviewing them?

- a) case study
- b) naturalistic observation
- c) survey
- d) controlled study

Answer: c

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

104. Dr. Jokinen prepares a set of questions to ask college students about their drinking behaviour and their attitudes toward alcohol. Dr. Jokinen is undertaking

- a) a survey.
- b) a case study.
- c) a naturalistic observation.
- d) experimental research.

Answer: a

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

105. Which of the following research methods involves giving participants a questionnaire or interviews them?

- a) double-blind
- b) naturalistic observation
- c) survey
- d) controlled study

Answer: c

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

106. A study conducted by Landsberger (1958) suggested that when workers knew they were being observed their productivity increased regardless of what changes were made to the workplace. This finding became known as the

- a) the Landsberger effect.
- b) the worker bias effect.
- c) the Hawthorne effect.
- d) the productivity effect.

Answer: c

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

107. In which of the following situations would you be most likely to find the Hawthorne effect?

- a) Candice's supervisor tells her she needs to accomplish more during her workday.
- b) Mason works for a telemarketing company where his supervisor can listen in on his calls at any moment.
- c) Jared has promised himself he will go for a walk after he finishes the housework.
- d) Hannah conducts quality control checks at a factory.

Answer: d

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and

experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

108. A popular women's magazine published a survey in their latest division asking about the division of housework between men and women. Based on the results of the survey, they plan to publish an article in the next edition claiming that women are still responsible for 90% of household chores. This result demonstrates

- a) researcher bias.
- b) sampling bias.
- c) participant bias.
- d) demand characteristics.

Answer: b

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

109. If a presidential candidate concludes from a poll conducted in Edmonton that he is ahead in the race and that from those results that he will win the election nationwide, then the candidate is guilty of _____.

- a) experimenter bias
- b) sampling bias
- c) the placebo effect
- d) lack of adequate controls

Answer: b

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

110. Gabby is conducting a survey on people's attitudes toward building a new playground in her subdivision. She goes to all the houses in the subdivision where she knows parents with children live. She tells you she is going to tell her subdivision board that everyone is in favour of building a new playground. What would you tell Gabby about her survey?

- a) the results of her survey are reliable and valid.
- b) The results of her survey are reliable but not valid.
- c) The results of her survey are valid but not reliable.
- d) The results of her survey are not representative of the population.

Answer: d

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

111. Dr. Grantley is conducting a case study on the effectiveness of melatonin in the treatment of depression associated with seasonal affective disorder. Which of the following is a possible concern about Dr. Grantley's research?

- a) participant bias
- b) researcher bias
- c) sampling bias
- d) all of the above

Answer: b

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

112. Which of the following researchers is using a double-blind procedure?

- a) Dr. Mulhan, who has divided his participants into an experimental and control group but does not know which participants are in which group.
- b) Dr. Helia, who has used random assignment to divide his participants into experimental and control groups.
- c) Dr. Fitzpatrick, who has used random selection to divide his participants into experimental and control groups.
- d) Dr. Latifah, who has used random assignment to divide his participants into independent and dependent variable groups.

Answer: a

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

113. One way to decrease participant bias is to _____.

- a) conduct single-blind and double-blind studies
- b) use the selectivity model
- c) use no placebo controls
- d) it is impossible to decrease participant bias

Answer: a

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

114. Assuming Colette could get ethical approval for this study (which, in the real world, she could not) please answer the following: Colette, the counselor at a high school, asks student participants from the high school to answer questions about illegal drug use. To her surprise all of the students tell her that they do not use drugs of any kind. Colette is surprised but should not be, due to _____.

- a) variability
- b) demand characteristics
- c) a blind procedure
- d) a dependent variable

Answer: b

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

115. To avoid biasing participants, experiments need to reduce which of the following?

- a) operationalizing
- b) dependent variables
- c) demand characteristics
- d) random sampling

Answer: c

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

116. Reese and her roommate were participants in a study researching the affects of playing computer games. Every time Reese would play a computer game, her roommate would leave the house. If the independent variable was "computer game play," which group did Reese's roommate belong to?

- a) control
- b) experimental
- c) double-blind
- d) sample

Answer: a

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

117. The control group in an experiment is the group in which participants _____.

- a) receive no treatment
- b) receive the dependent variable
- c) do not receive the dependent variable
- d) receive the independent variable

Answer: a

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

118. The group in an experiment who is exposed to the independent variable is called the _____ group. The group that has not been exposed to the independent variable is called the _____ group.

- a) independent; dependent
- b) dependent; independent
- c) independent; independent
- d) experimental; control

Answer: d

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

119. Experimental group is to control group as ____ is to ____.

- a) independent variable; no independent variable
- b) dependent variable; no dependent variable
- c) independent variable; dependent variable
- d) dependent variable; independent variable

Answer: a

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

120. In an industrial psychology experiment, one group of participants is exposed to heat stress; another is not. All participants' performance on a manual dexterity task is then examined. Which set below contains equivalent items?

- a) independent variable; experimental group; no stress group
- b) independent variable; experimental group; heat stress group
- c) no independent variable; control group; heat stress group.
- d) no independent variable; experimental group; no stress group

Answer: b

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

121. At their University, Drs. Chase and Sanborn are conducting an experiment on the effects of caffeine on memory. Participants are randomly assigned to a caffeine or a no-caffeine group and their recall of items on a word list is later assessed. Which pair below correctly names and identifies the variables in this experiment?

- a) word recall – control variable; caffeine – experimental variable
- b) word recall – independent variable; caffeine – dependent variable
- c) word recall – dependent variable; caffeine – independent variable
- d) word recall – experimental variable; caffeine – control variable

Answer: c

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

122. Which of the following reflects the correct order of steps psychologists follow in conducting research?

- a) develop a hypothesis – analyze the data – identify questions of interest – build a theory
- b) build a theory – develop a hypothesis – analyze the data – identify questions of interest
- c) develop a hypothesis – build a theory – select a research method – identify questions of interest
- d) develop a hypothesis – select a research method – analyze the data – build a theory

Answer: d

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: List steps in the research process and key characteristics of descriptive and

experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

123. Case studies, naturalistic observation, and surveys are examples of ____ research methods.

- a) observational
- b) descriptive
- c) predictive
- d) experimental

Answer: b

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

124. Description is to explanation as ____ is to ____.

- a) naturalistic observation; survey research
- b) survey research; naturalistic observation
- c) naturalistic observation; experimental research
- d) experimental research; survey research

Answer: c

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

125. In which of the following alternatives is a scientific goal matched with an appropriate research method?

- a) description – experimental research
- b) explanation – survey research
- c) explanation – experimental research
- d) explanation – case study

Answer: c

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

126. Liam is trying to decide whether to study the relationship between alcohol consumption and safe sex using survey research techniques or experimental research methods. Which of the following alternatives most accurately identifies considerations Liam should keep in mind as he plans his research?

- a) Survey responses are prone to biases, but survey work would allow Liam to identify causes and effects. Experimental research is more artificial but would allow Liam to control variables.
- b) Both survey research and experimental methodology involve somewhat artificial conditions. However, both survey research and experimental research are fairly easy to conduct.
- c) Both survey research and experimental methodology would allow Liam to identify causes and effects. However, experimental research usually involves artificial laboratory conditions, while survey responses may reflect biases.
- d) Experimental research usually involves artificial laboratory conditions but would allow Liam to identify causes and effects. Survey research does not allow cause-effect-conclusions, and survey responses may reflect biases.

Answer: d

Difficulty: Hard

Bloomcode: Evaluation

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

127. Dr. Ireland deliberately varied the imageability of items on a list and later measured participants' recall of the items. Dr. Ireland conducted a(n) ____ study.

- a) naturalistic
- b) correlational
- c) observational
- d) experimental

Answer: d

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

128. A researcher would use _____ research, if they were interested in determining whether listening to subliminal advertising causes an increase in sales of products.

- a) descriptive
- b) correlational
- c) naturalistic observation
- d) experimental

Answer: d

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

129. Dr. Girard is conducting a detailed examination of a patient with dissociative identity disorder. Dr. Girard is undertaking

- a) a survey.
- b) experimental research.
- c) a case study.
- d) naturalistic observation.

Answer: c

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

130. Noel is conducting a study on how teachers' interactions with students with learning disabilities might differ from those without learning disabilities. He decides to sit in a series of classes to observe the interactions between teachers and their students. Noel has decided to use the method known as

- a) case study.
- b) experiment.
- c) control study.
- d) naturalistic observation.

Answer: d

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

131. Which of the following prominent psychologists developed his theories primarily through case study work?

- a) James
- b) Freud
- c) Skinner
- d) Wundt

Answer: b

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

132. Survey is to case study as ____ is to ____.

- a) experimental; descriptive
- b) descriptive; experimental
- c) one participant; many participants
- d) many participants; one participant

Answer: d

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

133. In a procedure called _____, participants are placed in experimental conditions on the basis of chance, thus minimizing biases or pre-existing differences in the groups.

- a) random sampling
- b) random assignment
- c) group selection
- d) experimental assignment

Answer: b

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

134. If you flip a coin to determine whether you should be in Group A or Group B for an in-class experiment, you would be using the _____ procedure.

- a) experimental assignment
- b) independent selection
- c) representative grouping
- d) random assignment

Answer: d

Difficulty: Medium

Bloomcode: Application

Learning Objective: List steps in the research process and key characteristics of descriptive and experimental psychological research methods.

Section Reference: How Do Psychologists Conduct Research?

135. Elijah has conducted an experiment and now wants to conduct experimental analyses to summarize his findings and to draw conclusions regarding the effect of the independent variable on the dependent variable. In the first instance, Elijah needs to complete _____ and in the second instance he needs to complete _____.

- a) descriptive statistics; inferential statistics
- b) correlation coefficients; inferential statistics
- c) descriptive statistics; correlational coefficients
- d) inferential statistics; descriptive statistics

Answer: a

Difficulty: Medium

Bloomcode: Application

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

136. In inferential statistics, why would a researcher examine the effect size of a relationship between variables?

- a) to find out if the relationship is significant
- b) to assess the direction of the relationship
- c) to assess the variability in the data scores
- d) to assess the strength of the relationship

Answer: d

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

137. Which of the following reflects the range of the correlation coefficient?

- a) zero to +1.00
- b) -1.00 to zero
- c) -10.00 to +10.00
- d) -1.00 to +1.00

Answer: d

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

138. In psychology, a test of statistical significance must yield a probability statistic of _____ to be considered significant.

- a) 1.00
- b) .95
- c) .5
- d) .05

Answer: d

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

139. A correlation coefficient measures:

- a) whether differences are non-random.
- b) mean differences and variance within groups.
- c) the strength and nature of the relationship between two variables.
- d) how scores vary by group.

Answer: c

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

140. In a correlation coefficient, the number represents the _____ of the relationship, and the plus or negative sign reflects the _____ of the relationship.

- a) strength; direction
- b) direction; strength
- c) significance; meaning
- d) meaning; significance

Answer: a

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

141. If a researcher finds a correlation of -0.86 between two variables, which of the following would be the most accurate interpretation?

- a) It suggests there is no meaningful relationship between the variables.
- b) You would not be able to reliably predict the change in variable B based on the change in variable A.
- c) As it is a negative correlation, there is no relationship between the two variables.
- d) There is a strong, predictable relationship between the two variables.

Answer: d

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

142. If every time variable A increases by two units, variable B increases by two units, the correlation coefficient would be

- a) 0.00.
- b) +1.00.
- c) -1.00.
- d) +2.00.

Answer: b

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

143. Which statistical approach would a researcher use if interested in examining the relationship between personality characteristics and GPA?

- a) correlation
- b) standard deviation
- c) descriptive
- d) inferential

Answer: a

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

144. Which of the following represents a negative correlation?

- a) The longer you leave your money in the bank, the more interest it will earn.
- b) People who are less happy are also less helpful.
- c) The less you study the lower your grades will be.
- d) The greater the air pressure in a car tire, the less gas the car will use.

Answer: d

Difficulty: Medium

Bloomcode: Application

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

145. Bertrand is looking at a graph of the data of his correlational study. He finds that the data points from his study form a line that begins at the top left-hand side of the graph and goes to the bottom of the right-hand side of the graph. How should Bertrand interpret his results?

- a) There is a positive correlation between his variables. Those who score high on variable A also tend to score high on variable B.
- b) There is a negative correlation between his variables. Those who score high on variable A, tend to score low on variable B.
- c) There is a positive correlation between his variables. Those who score high on variable A, tend to score low on variable B.
- d) There is a negative correlation between his variables. Those who score low on variable A, also tend to score low on variable B.

Answer: b

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

146. Charlotte and Hunter have both found correlations in their psychology Honours studies. Charlotte's correlation was $-.85$ and Hunter's correlation was $+.62$. Which of the following statements would be true?

- a) Charlotte found a stronger relationship between her variables than Hunter did.
- b) Charlotte found that as one variable increased, the other variable also increased.
- c) Hunter found a stronger relationship between his variables than Charlotte did.
- d) Hunter found that as one variable increased the other decreased.

Answer: a

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

147. Wakana has analyzed her data and is reporting a statistic of $+0.64$. Wakana is most likely reporting the _____.

- a) standard deviation
- b) t-test statistic
- c) correlation coefficient
- d) the difference between groups

Answer: c

Difficulty: Medium

Bloomcode: Application

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

148. With regard to the correlation coefficient, the number represents the _____ of the relationship, and the negative or plus sign reflects the _____ of the relationship.

- a) direction; size
- b) size; direction
- c) significance; meaning
- d) meaning; significance

Answer: b

Difficulty: Medium

Bloomcode: Application

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

149. Which of the following is an example of a zero correlation?

- a) the relationship between your grades and how much time you spend studying
- b) the relationship between your alcohol consumption and physical reaction time
- c) the relationship between intensity of rain and umbrella use
- d) the relationship between your adult height and intelligence

Answer: d

Difficulty: Medium

Bloomcode: Application

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

150. A relationship where, as the score on one variable increases, the score on the other variable decreases, is called a(n) _____.

- a) insignificant correlation
- b) positive correlation
- c) negative correlation
- d) zero correlation

Answer: c

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

151. A correlation of $+0.40$ represents a _____ positive relationship between two variables.

- a) weak
- b) moderate
- c) strong
- d) perfect

Answer: b

Difficulty: Medium

Bloomcode: Application

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

152. There is a correlation between cancer and stress. Given this, which of the following statements is true?

- a) Cancer causes stress.
- b) Stress causes cancer.
- c) Knowing a person's stress level may help to predict that person's likelihood of cancer.
- d) Obesity causes both stress and likelihood of cancer to increase.

Answer: c

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

153. Corinne is analyzing the data from a study examining the relationship between watching violence on television and aggression. Which of the following would show the strongest relationship between the variables?

- a) -0.24
- b) +0.36
- c) 0.00
- d) +0.64

Answer: d

Difficulty: Medium

Bloomcode: Application

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

154. Sophie has completed the analyses in her large correlational study. For one pair of variables, Sophie found a correlation coefficient of -0.65 . For another pair she found a coefficient of $+0.13$. Which alternative below BEST respectively describes the two correlations?

- a) weak negative relationship; weak negative relationship
- b) moderate positive relationship; very weak positive relationship
- c) moderate negative relationship; moderate positive relationship
- d) strong negative relationship; weak positive relationship

Answer: d

Difficulty: Medium

Bloomcode: Application

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

155. Mackenzie's research showed a -0.61 correlation between weight and hours of exercise. What can Mackenzie conclude from her research?

- a) Exercising more causes an increase in self-esteem and that causes a person to be motivated to keep their weight down.
- b) People who exercise make good food choices, so exercise causes a person to eat properly and that causes lower weight.
- c) Exercising more causes a person's weight to be lower.
- d) Weight and exercise are related, but Mackenzie cannot draw a conclusion about cause and

effect.

Answer: d

Difficulty: Medium

Bloomcode: Application

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

156. Terran's class average on the exam was 78.8%. The professor told the class that the average student differed from that average by 7.6%. Terran was confused. He asks you what the 7.6% represents. You tell him that it represents the _____.

- a) mean
- b) mode
- c) correlation
- d) standard deviation

Answer: d

Difficulty: Medium

Bloomcode: Application

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

157. Professor Trentor is comparing the mean test grades from his two Introductory Psychology classes. Class 1 has a mean grade of 73% with a standard deviation of 6.1. Class 2 has a mean grade of 73% with a standard deviation of 21.2. Which of the following statement would be most accurate about the grades in each class?

- a) Class 1 actually did better than Class 2.
- b) Class 2 actually did better than Class 1.
- c) Class 1 had more extreme scores than Class 2.
- d) Class 2 had more extreme scores than Class 1.

Answer: d

Difficulty: Medium

Bloomcode: Application

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

158. Dr. Ormson measures the calorie intake of a group of 20-year-olds and finds that the average number of calories consumed per day is greater for males than it is for females. If he

also wanted to know how much the number of calories consumed vary within each group, what statistic should he use?

- a) mean
- b) standard deviation
- c) correlation coefficient
- d) probability statistic

Answer: b

Difficulty: Medium

Bloomcode: Application

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

159. The average Intelligence Quotient (IQ) for humans is 100, and 95% of the population has a score between 70 and 130. How much scores vary within a group is called the

- a) mean variance.
- b) significant deviation.
- c) inferential variance.
- d) standard deviation.

Answer: d

Difficulty: Medium

Bloomcode: Application

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

160. The strength and nature of a relationship between two variables can be expressed using

- a) inferential statistics
- b) descriptive statistics
- c) an analysis of variance
- d) a correlation coefficient

Answer: d

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

161. Kofi is conducting a study that compares the means between four groups. Which of the following statistical tests is he most likely to use?

- a) t-test
- b) p-test
- c) correlation coefficient
- d) analysis of variance

Answer: d

Difficulty: Medium

Bloomcode: Application

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

162. Effect size is to _____ as coefficient is to _____.

- a) inferential; correlation
- b) correlation; inferential
- c) direction; strength
- d) direction; direction

Answer: a

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

163. For which of the following types of studies would you use inferential and descriptive statistics to analyze the data?

- a) correlational
- b) experiments
- c) correlational and experiments
- d) studies looking for relationships between variables

Answer: b

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

164. To determine differences between scores of two different groups, a researcher would look at the

- a) correlation coefficient.
- b) standard deviation.
- c) means.
- d) direction of the relationship.

Answer: c

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

165. Ichika has calculated the arithmetic average of the scores of all participants each group in her study. Ichika has calculated the _____.

- a) mean
- b) median
- c) mode
- d) standard deviation

Answer: a

Difficulty: Medium

Bloomcode: Application

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

166. Which of the following accurately describes the factors considered in the calculation of t-tests and the analysis of variance?

- a) Both use the means.
- b) Both use the means and standard deviations.
- c) Both use the means, standard deviations, and group size.
- d) The t-test uses the mean and standard deviation, the analysis of variance uses the mean, standard deviation, and the group size

Answer: c

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

167. Which of the following studies would be best analyzed using a t-test?

- a) Examining the relationship between two variables.
- b) Examining the relationship between three or more variables.
- c) Examining the difference in the means between two groups.
- d) Examining the difference in the means between three or more groups.

Answer: c

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

168. Dr. Sadik is studying the effects of a new anxiety drug on the ability of obsessive-compulsive patients to ignore their obsessive thoughts and not need to carry out their compulsive behaviours. To do this, she uses three doses of drug on different groups of patients: some take a high dose, others a low dose, and others take a placebo sugar pill. She then measures the number of compulsive behaviours performed by each patient. What statistic would Dr. Sadik use to determine if she has a significant difference between groups?

- a) correlation coefficient
- b) t-test
- c) analysis of variance
- d) standard deviation

Answer: c

Difficulty: Hard

Bloomcode: Evaluation

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

169. The analysis of variance test is used to

- a) assess the change in variable A as variable B changes.
- b) predict the change in variable A as variable B changes.
- c) compare the means of two groups.
- d) compare the means of three or more groups.

Answer: d

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

170. When a statistical test indicates that it was the manipulation of the independent variable that caused the change in the dependent variable, a researcher can claim that their finding was _____.

- a) important
- b) stable
- c) significant
- d) due to chance.

Answer: c

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

171. Aicha just finished analyzing her data and found a probability statistic of $p = .85$. Which of the following most accurately represents the interpretation of this statistic?

- a) 85% of Aicha's participant scores were similar.
- b) There was a great deal of variation in the scores of Aicha's participants.
- c) There is an 85% chance that the results Aicha found in her study did not occur by chance.
- d) There is a 15% chance that the results Aicha found in her study did not occur by chance.

Answer: d

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

172. Which value indicates the greatest likelihood that a result did NOT occur by chance alone?

- a) .005
- b) .05
- c) .5
- d) .001

Answer: d

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

173. Using inferential statistics, Jackson has found a statistically significant result in his study. To further examine the strength of the relationship between the variables, Jackson would calculate the

- a) correlation coefficient.
- b) probability statistic.
- c) effect size.
- d) standard deviation.

Answer: c

Difficulty: Medium

Bloomcode: Application

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

174. Which of the following order accurately reflects the research process?

- a) Hypothesis – theory – replication
- b) Theory – hypothesis – replication
- c) Replication – hypothesis – theory
- d) Hypothesis – replication – theory

Answer: d

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

175. In using a scientific approach, what step would follow developing a hypothesis?

- a) building a theory
- b) testing the hypothesis
- c) reporting the findings
- d) making observations

Answer: b

Difficulty: Easy

Bloomcode: Comprehension

Learning Objective: List two core beliefs of science, and describe the steps in the scientific method.

Section Reference: What Is a Science?

176. Immediately after the title of a journal article in psychology, a brief overview of the research always appears before the introduction begins. This overview is called a(n) ____.

- a) synopsis
- b) preface
- c) precis
- d) abstract

Answer: d

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: Describe what information is conveyed by statistics, including correlation coefficients, means, and standard deviations, and explain how psychologists draw conclusions about cause and effect.

Section Reference: How Do Psychologists Make Sense of Research Results?

177. Every institution that conducts research using human participants must establish a research oversight group that evaluates research to protect the rights of the participants in the study. This oversight group is called the

- a) Social Sciences and Humanities Ethics Council.
- b) Canadian Psychological Ethics Council.
- c) Research Ethics Board.
- d) University Ethical Research Council.

Answer: c

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: Describe what ethical steps psychologists take to protect the rights of human research participants.

Section Reference: What Ethical Research Guidelines Do Psychologists Follow?

178. Idana has used mild deception in her research experiment. After each participant completes the experiment, she provides them with the information about the study that she had withheld at the beginning of the experiment. Idana is complying with the ethical guideline of

- a) informed consent.
- b) debriefing.
- c) voluntary withdrawal.
- d) post-experiment review.

Answer: b

Difficulty: Medium

Bloomcode: Application

Learning Objective: Describe what ethical steps psychologists take to protect the rights of human research participants.

Section Reference: What Ethical Research Guidelines Do Psychologists Follow?

179. Camilla is applying for ethics approval to begin her psychology honours project. Which of the following might be a reason the REB would reject her application?

- a) She is not paying her participants enough money to take part in the study.
- b) She is conducting research with persons with intellectual disabilities.
- c) She is using mild deception in her research because it would influence the outcome if her participants knew exactly what she was testing.
- d) She does not provide sufficient information to the participants about the risks and benefits of participating in the study.

Answer: d

Difficulty: Medium

Bloomcode: Analysis

Learning Objective: Describe what ethical steps psychologists take to protect the rights of human research participants.

Section Reference: What Ethical Research Guidelines Do Psychologists Follow?

180. Jennifer is a student researcher wants to study memory in children with autism. As Jennifer works part time in a school for children with autism, she plans to ask the parents of the students if they will allow their children to participate. What ethical guideline is Jennifer violating?

- a) informed consent
- b) participation must be voluntary
- c) deception or incomplete disclosure
- d) protect participants from harm

Answer: b

Difficulty: Medium

Bloomcode: Application

Learning Objective: Describe what ethical steps psychologists take to protect the rights of human research participants.

Section Reference: What Ethical Research Guidelines Do Psychologists Follow?

181. You are unsure whether you want to complete an experiment you began an hour ago. According to the Code of Ethics of the Canadian Psychological Association, when you ask the researcher if you have to continue, the researcher should respond with ____.

- a) "You have the right to drop out of the study at any time."
- b) "I'm sorry, the experiment must continue."
- c) "Please continue. I will debrief you afterwards."
- d) "You may drop the study now, but you will forfeit credit."

Answer: a

Difficulty: Medium

Bloomcode: Application

Learning Objective: Describe what ethical steps psychologists take to protect the rights of human research participants.

Section Reference: What Ethical Research Guidelines Do Psychologists Follow?

182. When a research participant is supplied with full information about the study after their participation, this is called

- a) informed consent.
- b) debriefing.
- c) informed deception.
- d) incomplete disclosure.

Answer: b

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: Describe what ethical steps psychologists take to protect the rights of human research participants.

Section Reference: What Ethical Research Guidelines Do Psychologists Follow?

183. Eleni has just finished participating in a research experiment. She is quite surprised to learn from the researcher that she was not advised of the true purpose of the study during the informed consent process. The researcher is providing Eleni with

- a) a post-experimental review.
- b) a debriefing.
- c) delayed consent.
- d) voluntary participation review

Answer: b

Difficulty: Medium

Bloomcode: Application

Learning Objective: Describe what ethical steps psychologists take to protect the rights of human research participants.

Section Reference: What Ethical Research Guidelines Do Psychologists Follow?

184. Zahra wants to conduct a research study with 10-year old boys as participants. What steps must Zahra take to ensure her participants are treated ethically?

- a) Obtain informed consent from the child's school
- b) Send the child's school a recruitment form
- c) Provide the child with extra time to read the consent form
- d) Obtain informed consent from both the child and the guardians

Answer: d

Difficulty: Medium

Bloomcode: Application

Learning Objective: Describe what ethical steps psychologists take to protect the rights of human research participants.

Section Reference: What Ethical Research Guidelines Do Psychologists Follow?

185. Kelsea is extremely upset that her research proposal was rejected by the ethics review board. She wanted to study the effects of a new memory strategy on grades, and she proposed to tell the participants all the details at the outset of the study. Furthermore, she was going to compensate them with a guaranteed A+ in the course. What reason do you think the ethics review board gave for rejecting Kelsea's proposal?

- a) The compensation was too high.
- b) It was not voluntary.
- c) She needed to do an animal study first.
- d) There is no such thing as a new memory strategy.

Answer: a

Difficulty: Medium

Bloomcode: Application

Learning Objective: Describe what ethical steps psychologists take to protect the rights of human research participants.

Section Reference: What Ethical Research Guidelines Do Psychologists Follow?

186. A drug company wants to test the side effects of a new drug on human participants. They are offering \$500 to their participants and think that people living in homeless shelters might want to participate. They want to post flyers about the study in all the homeless shelters in the city. How might a REB respond to the drug company's ethics application?

- a) They would approve it because the drug company would be helping the homeless participants by giving them money.
- b) They would approve it because the drug company will probably not use deception.
- c) They will reject it because \$500 might persuade a person who is homeless to overlook the risks of the study in favour of receiving the money.
- d) They would reject it because the homeless would be considered a vulnerable population and incapable of giving informed consent.

Answer: c

Difficulty: Hard

Bloomcode: Evaluation

Learning Objective: Describe what ethical steps psychologists take to protect the rights of human research participants.

Section Reference: What Ethical Research Guidelines Do Psychologists Follow?

187. About ____% of psychological research involves animals. Of the animals used, approximately ____% are primates.

- a) 8; 5
- b) 8; 25
- c) 25; 5
- d) 25; 25

Answer: a

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: Describe what ethical steps psychologists take to protect the rights of human research participants.

Section Reference: What Ethical Research Guidelines Do Psychologists Follow?

188. How is animal research at colleges, universities, and institutes regulated?

- a) It is overseen by the same REBs that regulate research with human participants.
- b) It is overseen by the Canadian Council on Animal Care, a different organization than the REB that regulates research with human participants.
- c) In contrast to research with human participants, the regulation of animal research is left to the common sense of individual scientists.
- d) Application must be made to a provincial board prior to each study involving animal subjects.

Answer: b

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: Describe what ethical steps psychologists take to protect the rights of human research participants.

Section Reference: What Ethical Research Guidelines Do Psychologists Follow?

189. According to your text, approximately ____% of the public support animal research, provided that the research serves scientific purposes.

- a) 50
- b) 65
- c) 75
- d) 90

Answer: c

Difficulty: Easy

Bloomcode: Knowledge

Learning Objective: Describe what ethical steps psychologists take to protect the rights of human research participants.

Section Reference: What Ethical Research Guidelines Do Psychologists Follow?

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