

**Test Bank for Health Psychology
Understanding the Mind-Body Connection
3rd Sanderson**

Chapter 2: Research Methods

Test Bank

Multiple Choice

1. Theory is to hypothesis as _____ is to _____.

- A. description; explanation
- B. explanation; prediction
- C. prediction; description
- D. prediction; explanation

Ans: B

Learning Objective: 2-1: Describe the scientific method.

Cognitive Domain: Analysis

Answer Location: Understanding the Scientific Method

Difficulty Level: Medium

2. With respect to the scientific method, the statistics courses that undergraduate psychology degree programs usually require are MOST relevant to the step of _____.

- A. analyzing data
- B. developing a theory
- C. proposing a hypothesis
- D. revising a theory

Ans: A

Learning Objective: 2-1: Describe the scientific method.

Cognitive Domain: Application

Answer Location: Understanding the Scientific Method

Difficulty Level: Medium

3. A researcher assesses stress by measuring levels of cortisol in the blood. This is a(n) _____ definition of stress.

- A. operational
- B. theoretical
- C. experimental
- D. descriptive

Ans: A

Learning Objective: 2-1: Describe the scientific method.

Cognitive Domain: Application

Answer Location: Understanding the Scientific Method

Difficulty Level: Medium

4. With respect to descriptive research methods, Sigmund Freud's theory was built on a foundation of _____ data.

- A. archival research

- B. case study
- C. survey
- D. cross-sectional

Ans: B

Learning Objective: 2-2: Compare different types of descriptive research methods.

Cognitive Domain: Knowledge

Answer Location: Case Studies

Difficulty Level: Easy

5. Dr. Carroll is conducting _____ when she tests a hypothesis by examining data from the National Nursing Home Survey available on the website of the National Center for Health Statistics.

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

Ans: A

Learning Objective: 2-2: Compare different types of descriptive research methods.

Cognitive Domain: Application

Answer Location: Archival Research

Difficulty Level: Medium

6. Inaccurate reporting, constrained response options, and leading questions are all potential drawbacks of _____.

- A. naturalistic observation
- B. experiments
- C. case studies
- D. surveys

Ans: D

Learning Objective: 2-2: Compare different types of descriptive research methods.

Cognitive Domain: Comprehension

Answer Location: Surveys

Difficulty Level: Easy

7. Which field MOST explicitly recognizes that genes and the environment always interact?

- A. epigenetics
- B. genetics
- C. behavioral genetics
- D. behavioral health

Ans: A

Learning Objective: 2-2: Compare different types of descriptive research methods.

Cognitive Domain: Comprehension

Answer Location: Behavioral Genetics

Difficulty Level: Hard

8. Dr. Jackson is performing statistical analyses to combine the results of a number of studies investigating the relationship between locus of control and health-promoting behaviors among young adults. Dr. Jackson is conducting a _____.

- A. meta-analysis
- B. significance test
- C. replication
- D. longitudinal study

Ans: A

Learning Objective: 2-2: Compare different types of descriptive research methods.

Cognitive Domain: Application

Answer Location: Meta-Analysis

Difficulty Level: Medium

9. A researcher is MOST likely to find a _____ correlation between scores on a measure of social support and scores on a measure of subjective well-being. Assume that higher scores on the measure indicate greater social support and higher well-being.

- A. minimal
- B. negative
- C. perfect
- D. positive

Ans: D

Learning Objective: 2-2: Compare different types of descriptive research methods.

Cognitive Domain: Comprehension

Answer Location: Distinguishing Correlation and Causation

Difficulty Level: Medium

10. In an experiment, the factor under consideration as a potential cause is generally the _____ variable.

- A. dependent
- B. randomized
- C. independent
- D. control

Ans: C

Learning Objective: 2-3: Summarize the features of experiments and quasi-experiments.

Cognitive Domain: Comprehension

Answer Location: Features of Experimental Design

Difficulty Level: Medium

11. Experiments differ from descriptive research techniques in that experiments _____.

- A. use groups of participants that are carefully matched with respect to key variables
- B. track a group of participants for an extended period of time
- C. involve the random assignment of participants to conditions
- D. are conducted on only a single individual

Ans: C

Learning Objective: 2-3: Summarize the features of experiments and quasi-experiments.

Cognitive Domain: Analysis

Answer Location: Features of Experimental Design

Difficulty Level: Hard

12. Suppose that in one study, breast-cancer patients write either about their feelings concerning their diagnosis or simply about the facts of their disease. For each group, the researchers track the number of contacts the women make with the health-care system for 60 days. In this study, the number of contacts is a(n) _____ variable.

- A. dependent
- B. randomized
- C. independent
- D. control

Ans: A

Learning Objective: 2-3: Summarize the features of experiments and quasi-experiments.

Cognitive Domain: Application

Answer Location: Features of Experimental Design

Difficulty Level: Medium

13. A developmental health psychologist is comparing middle-aged and older-adults' perceptions of health care options in her community. She is matching the adults on such variables as ethnicity, education, and SEs. The psychologist is conducting a(n) _____ using a _____ design.

- A. experiment; cross-sectional
- B. experiment; longitudinal
- C. quasi-experiment; cross-sectional
- D. quasi-experiment; longitudinal

Ans: C

Learning Objective: 2-3: Summarize the features of experiments and quasi-experiments.

Cognitive Domain: Application

Answer Location: Quasi-Experiments

Difficulty Level: Medium

14. Consider these two statements: (1) Morbidity always exceeds mortality. (2) Prevalence always exceeds incidence. Which of these statements is/are true?

- A. Only Statement (1) is true.
- B. Only Statement (2) is true.
- C. Both statements are true.
- D. Neither statement is true.

Ans: C

Learning Objective: 2-4: Describe different types of epidemiological research methods.

Cognitive Domain: Analysis

Answer Location: Epidemiological Research Methods

Difficulty Level: Hard

15. With respect to epidemiological research, prospective study is to retrospective study as _____ is to _____.

- A. past; future
- B. future; past
- C. correlational; experimental
- D. experimental; correlational

Ans: B

Learning Objective: 2-4: Describe different types of epidemiological research methods.

Cognitive Domain: Analysis

Answer Location: Observational Methods

Difficulty Level: Medium

16. Which method is considered the “gold standard” in clinical research?

- A. randomized controlled trials
- B. meta-analyses
- C. natural experiments
- D. naturalistic observation

Ans: A

Learning Objective: 2-4: Describe different types of epidemiological research methods.

Cognitive Domain: Knowledge

Answer Location: Randomized Controlled Trials (RCTs)

Difficulty Level: Easy

17. C. J. has been diagnosed with both attention-deficit hyperactivity disorder and cocaine abuse disorder. C. J.'s case BEST illustrates _____.

- A. mortality
- B. prevalence
- C. comorbidity
- D. correlation

Ans: C

Learning Objective: 2-4: Describe different types of epidemiological research methods.

Cognitive Domain: Application

Answer Location: Randomized Controlled Trials (RCTs)

Difficulty Level: Medium

18. The two types of validity are _____ and _____ validity.

- A. observational; correlational
- B. descriptive; experimental
- C. observational; correlational
- D. internal; external

Ans: D

Learning Objective: 2-5: Compare internal and external validity.

Cognitive Domain: Comprehension

Answer Location: Evaluating Research Methods

Difficulty Level: Easy

19. Which research strategy is correctly matched with the type of validity it is aimed at minimizing?

- A. using a double-blind design--internal validity
- B. replicating a study--internal validity
- C. using a representative sample--internal validity
- D. using a placebo--external validity

Ans: A

Learning Objective: 2-5: Compare internal and external validity.

Cognitive Domain: Comprehension

Answer Location: Avoid Experimenter Expectancy Effects

Difficulty Level: Medium

20. A _____ sample is one that is easily accessible to the researcher.

- A. randomized
- B. double-blind
- C. representative
- D. convenience

Ans: D

Learning Objective: 2-5: Compare internal and external validity.

Cognitive Domain: Knowledge

Answer Location: Use a Representative (Not Convenience) Sample

Difficulty Level: Easy

21. Iyesha reads a journal article reporting a study in which a small sample of women undertook tests of spatial ability at two points during their menstrual cycle. She decides to conduct a similar study using a larger sample of women. Iyesha is performing a _____.

- A. meta-analysis
- B. replication
- C. significance test
- D. correlation

Ans: B

Learning Objective: 2-5: Compare internal and external validity.

Cognitive Domain: Application

Answer Location: Replicate the Study

Difficulty Level: Medium

22. O'Malley is telling participants before he begins his experiment that their participation is completely voluntary and that they can stop taking part at any time. Dr. Quick is providing a detailed explanation to participants who have just completed a study. Which statement is true?

- A. Dr. O'Malley is debriefing his participants. Dr. Quick is obtaining informed consent from her participants.

B. Dr. O'Malley is obtaining informed consent from his participants. Dr. Quick is debriefing her participants.

C. Both Dr. O'Malley and Dr. Quick are obtaining informed consent from their participants.

D. Both Dr. O'Malley and Dr. Quick are debriefing their participants.

Ans: B

Learning Objective: 2-6: Summarize ethical issues in conducting research in health psychology.

Cognitive Domain: Application

Answer Location: Human Research Ethics

Difficulty Level: Medium

23. Which sequence BEST reflects the order of events in a typical experimental session?

A. informed consent, then experiment, then debriefing

B. informed consent, then debriefing, then experiment

C. debriefing, then experiment, then informed consent

D. debriefing, then informed consent, then experiment

Ans: A

Learning Objective: 2-6: Summarize ethical issues in conducting research in health psychology.

Cognitive Domain: Comprehension

Answer Location: Human Research Ethics

Difficulty Level: Medium

24. In round figures, animals are used in about _____ of psychological research studies.

A. 10%

B. 25%

C. 35%

D. 50%

Ans: A

Learning Objective: 2-6: Summarize ethical issues in conducting research in health psychology.

Cognitive Domain: Comprehension

Answer Location: Animal Research Ethics

Difficulty Level: Easy

25. _____ psychologists and psychology majors support the use of animals in research.

A. Few

B. Some

C. Most

D. Almost all

Ans: C

Learning Objective: 2-6: Summarize ethical issues in conducting research in health psychology.

Cognitive Domain: Comprehension

Answer Location: Animal Research Ethics

Difficulty Level: Medium

True/False

1. When psychologists speak of empirical evidence, they are referring to evidence gathered using the scientific method.

Ans: T

Learning Objective: 2-1: Describe the scientific method.

Cognitive Domain: Comprehension

Answer Location: Understanding the Scientific Method

Difficulty Level: Medium

2. In descriptive research, a researcher manipulates behavior in a laboratory setting.

Ans: F

Learning Objective: 2-2: Compare different types of descriptive research methods.

Cognitive Domain: Comprehension

Answer Location: Descriptive Research Methods

Difficulty Level: Medium

3. Epigenetic changes can be passed from one generation to the next.

Ans: T

Learning Objective: 2-2: Compare different types of descriptive research methods.

Cognitive Domain: Knowledge

Answer Location: Behavioral Genetics

Difficulty Level: Easy

4. In quasi-experiments, the influence of third variables can be eliminated through careful participant matching procedures.

Ans: F

Learning Objective: 2-3: Summarize the features of experiments and quasi-experiments.

Cognitive Domain: Comprehension

Answer Location: Quasi-Experiments

Difficulty Level: Hard

5. Randomized controlled trials in clinical research are analogous to experiments in nonclinical research.

Ans: T

Learning Objective: 2-4: Describe different types of epidemiological research methods.

Cognitive Domain: Analysis

Answer Location: Randomized Controlled Trials (RCTs)

Difficulty Level: Medium

6. In a double-blind procedure, the researcher knows which participants are receiving the treatment.

Ans: F

Learning Objective: 2-5: Compare internal and external validity.

Cognitive Domain: Comprehension

Answer Location: Avoid Experimenter Expectancy Effects

Difficulty Level: Medium

7. The Tuskegee experiments had a lasting effect on African Americans' perception of health care professionals.

Ans: T

Learning Objective: 2-6: Summarize ethical issues in conducting research in health psychology.

Cognitive Domain: Knowledge

Answer Location: Understanding Research Ethics

Difficulty Level: Easy

8. Deception is NOT used in psychological research.

Ans: F

Learning Objective: 2-6: Summarize ethical issues in conducting research in health psychology.

Cognitive Domain: Comprehension

Answer Location: Medicine

Difficulty Level: Easy

Essay

1. Distinguish between positive and negative correlations. Suggest one pair of health-related variables that is probably positively correlated, and one that is probably negatively correlated. For each pair, draw a hypothetical scatterplot, being sure to label the axes.

Ans: In a positive correlation, scores on one variable go up or down as scores on the other do. In a negative correlation, scores on one variable go down as scores on the other go up. Number of cigarettes smoked per day and sick days taken might be positively correlated. By contrast, scores on a measure of social support might be negatively correlated with number of physical symptoms of ill health reported.

Scatterplots should resemble those shown in Figure 2.3 on page 36 of the textbook.

Learning Objective: 2-2: Compare different types of descriptive research methods.

Cognitive Domain: Application

Answer Location: Distinguishing Correlation and Causation

Difficulty Level: Medium

2. Define "randomized controlled trial (RCT)."

Consider this description of an RCT: Espada and colleagues (2016) conducted a test of the efficacy of a smoking cessation program for adolescents in Spain. Prospective

participants were recruited using a convenience sample, then randomly assigned to either a program condition or a control condition. The control condition consisted of adolescents placed on a waiting list for the program. Six months after the program, 8% of the program group had quit smoking, whereas no one in the control group had. This difference was statistically significant. After 1 year, 43% of the participants were available for follow-up data collection; this proportion was similar across both program and control conditions.

Making explicit reference to the concepts of internal and external validity, highlight several potential strengths and weakness of this study.

Ans: A randomized controlled trial (RCT) is a research technique that uses random assignment to conditions in order to test the effectiveness of different drugs or treatments.

Strengths: The random assignment of participants to conditions helps preserve internal validity by ensuring that differences between participants do not vary systematically with condition. While the attrition rate was high, it did not vary across conditions. Given the initial random assignment, it is likely that internal validity was not further threatened by the attrition.

Weaknesses: Internal validity may be compromised by the failure to include a placebo or to use a double-blind design. There are several threats to external validity in the design. The convenience sample and the high attrition make it less likely that the results will accurately to the entire population of teen smokers in Spain.

Learning Objective: 2-4: Describe different types of epidemiological research methods.

Cognitive Domain: Application

Answer Location: Randomized Controlled Trials (RCTs)

Difficulty Level: Hard