### CHAPTER 1 Why the Social Researcher Uses Statistics

#### **Multiple Choice Questions**

- 1. A hypothesis is a(n):
  - a. fundamental unit of scientific observation.
  - b. statement of the relationship between two or more variables.
  - c. scientific fact of truth.
  - d. observable and measurable variable.

Answer: b. statement of the relationship between two or more variables. Objective: 1.1 Illustrate research strategies employed by social researchers to test their hypotheses on the nature of social reality Topic: The Nature of Social Research Level: Knowledge Difficulty: Easy

- 2. In a hypothesis, the presumed cause is called the:
  - a. dependent variable.
  - b. independent variable.
  - c. aggregate.
  - d. constant.

Answer: b. independent variable. Objective: 1.1 Illustrate research strategies employed by social researchers to test their hypotheses on the nature of social reality Topic: The Nature of Social Research Level: Knowledge Difficulty: Easy

- 3. In a hypothesis, the presumed effect is called the:
  - a. dependent variable.
  - b. independent variable.
  - c. aggregate.
  - d. constant.

Answer: a. dependent variable.

Objective: 1.1 Illustrate research strategies employed by social researchers to test their hypotheses on the nature of social reality Topic: The Nature of Social Research Level: Knowledge Difficulty: Easy Instructions: Questions 4-7 refer to the following situation:

A social work student is interested in studying the relationship between the age of adults and their view on offshore drilling. The student plans to compare adults who consider themselves either extremely anti-drilling, anti-drilling, neutral, pro-drilling, or extremely pro-drilling.

- 4. The dependent variable is:
  - a. age.
  - b. view on offshore drilling.
  - c. state in which the person lives.
  - d. none of these answers are correct.

Answer: b. view on offshore drilling. Objective: 1.1 Illustrate research strategies employed by social researchers to test their hypotheses on the nature of social reality Topic: The Nature of Social Research Level: Apply Difficulty: Medium

- 5. What level of measurement is "view on offshore drilling" for this research question?
  - a. Nominal
  - b. Ordinal
  - c. Interval/ratio
  - d. None of these answers are correct.

Answer: b. Ordinal Objective: 1.4 Using series of numbers to do social research. Topic: The Nature of Social Research Level: Apply Difficulty: Medium

- 6. The researcher chose to measure age as a number between 18 and 110. What level of measurement is age for this research question?
  - a. Nominal
  - b. Ordinal
  - c. Interval/ratio
  - d. None of these answers are correct.

Answer: c. Interval/ratio Objective: 1.4 Using series of numbers to do social research. Topic: The Nature of Social Research Level: Apply Difficulty: Medium

- 7. The independent variable is:
  - a. age.
  - b. view on offshore drilling.
  - c. state in which the person lives.
  - d. none of these answers are correct.

Answer: a. age Objective: 1.1 Illustrate research strategies employed by social researchers to test their hypotheses on the nature of social reality Topic: The Nature of Social Research Level: Apply Difficulty: Medium

- 8. Nominal measurement is used primarily to:
  - a. name or categorize data.
  - b. rank order data.
  - c. both "name or categorize data" and "rank order data" are correct.
  - d. none of these answers are correct.

Answer: a. name or categorize data. Objective: 1.4 Illustrate how social researchers use numbers to categorize, rank, and score their data depending on the level of measurement Topic: Using Series of Numbers to do Social Research Level: Understand Difficulty: Easy

- 9. Ordinal measurement is used primarily to:
  - a. assign a score.
  - b. rank order data.
  - c. both "assign a score" and "rank order data" are correct.
  - d. none of these answers are correct.

Answer: b. rank order data.

Objective: 1.4 Illustrate how social researchers use numbers to categorize, rank, and score their data depending on the level of measurement Topic: Using Series of Numbers to do Social Research Level: Understand Difficulty: Easy

- 10. Interval/ratio measurement is used primarily to:
  - a. name or categorize data.
  - b. assign a score.
  - c. both "name or categorize data" and "assign a score" are correct.
  - d. none of these answers are correct.

Answer: b. assign a score. Objective: 1.4 Illustrate how social researchers use numbers to categorize, rank, and score their data depending on the level of measurement Topic: Using Series of Numbers to do Social Research Level: Understand Difficulty: Easy

- 11. A social researcher is interested in studying the relationship between an abstinence-only program and teen pregnancy. To test her hypothesis, she compares the results of 50 teens participating in an abstinence-only program to 50 teens participating in a more conventional sex- education program. What type of research is this?
  - a. Experiment
  - b. Survey
  - c. Content analysis
  - d. Secondary analysis

Answer: a. Experiment Objective: 1.1 Illustrate research strategies employed by social researchers to test their hypotheses on the nature of social reality. Topic: The Nature of Social Research Level: Apply Difficulty: Medium

- 12. A team of researchers is interested in determining how national political figures have been depicted historically on TV. The researchers painstakingly review the content of archival video footage to determine how objective and accurate the depictions are. What type of research is this?
  - a. Experiment
  - b. Survey
  - c. Content analysis
  - d. Secondary analysis

Answer: c. Content analysis

Objective: 1.1 Illustrate research strategies employed by social researchers to test their hypotheses on the nature of social reality. Topic: The Nature of Social Research Level: Apply Difficulty: Medium

- 13. The United States census occurs every 10 years and aims to have each American household answer a series of questions. What type of research is this?
  - a. Experiment
  - b. Survey

- c. Content analysis
- d. Secondary analysis

Answer: b. Survey Objective: 1.1 Illustrate research strategies employed by social researchers to test their hypotheses on the nature of social reality. Topic: The Nature of Social Research Level: Apply Difficulty: Medium

- 14. A social researcher is interested in studying patients' sense of spirituality to see if it correlates with how well they respond to treatment. She only reviews archival data previously collected in a scientific manner. What type of research is this?
  - a. Experiment
  - b. Survey
  - c. Content analysis
  - d. Secondary analysis

Answer: d. Secondary analysis Objective: 1.1 Illustrate research strategies employed by social researchers to test their hypotheses on the nature of social reality. Topic: The Nature of Social Research Level: Apply Difficulty: Medium

- 15. Which of the following is not true of the survey method?
  - a. Surveys often seek to reconstruct influences after they have occurred.
  - b. Surveys tend to be more representative than experiments.
  - c. Surveys establish cause and effect better than experiments.
  - d. Surveys usually measure but do not manipulate variables.

Answer: c. Surveys establish cause and effect better than experiments Objective: 1.1 Illustrate research strategies employed by social researchers to test their hypotheses on the nature of social reality. Topic: The Nature of Social Research Level: Apply Difficulty: Medium

- 16. Which of the following is not a research strategy?
  - a. An experiment
  - b. A survey
  - c. Participant observation
  - d. Interval data

> Answer: d. Interval data Objective: 1.1 Illustrate research strategies employed by social researchers to test their hypotheses on the nature of social reality. Topic: The Nature of Social Research Level: Understand Difficulty: Easy

- 17. Joining a radical environmentalist group to understand group dynamics and gather data over time is an example of which research strategy?
  - a. An experiment
  - b. Meta-analysis
  - c. Participant observation
  - d. A survey

Answer: c. Participant observation Objective: 1.1 Illustrate research strategies employed by social researchers to test their hypotheses on the nature of social reality. Topic: The Nature of Social Research Level: Apply Difficulty: Medium

- 18. In which of the following research strategies is the independent variable manipulated?
  - a. An experiment
  - b. A survey
  - c. Participant observation
  - d. All of these answers are correct

Answer: a. An experiment Objective: 1.1 Illustrate research strategies employed by social researchers to test their hypotheses on the nature of social reality. Topic: The Nature of Social Research Level: Understand Difficulty: Easy

- 19. In an experiment, the group not subject to experimental manipulation is called the \_\_\_\_\_
  - group.
  - a. treatment
  - b. independent
  - c. random
  - d. control

Answer: d. control

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Topic: The Nature of Social Research Level: Knowledge Difficulty: Easy

20. Which of the following is not a requirement of the nominal scale of measurement?

- a. The cases are mutually exclusive.
- b. The cases are mutually exhaustive.
- c. There are equal intervals between the cases.
- d. None of these answers are correct.

Answer: c. There are equal intervals between the cases Objective: 1.4 Using series of numbers to do social research. Topic: The Nature of Social Research Level: Understand Difficulty: Easy

#### **Short Answer Questions**

1. In human research, gender is generally considered a \_\_\_\_\_\_.

Answer: constant

2. In human research, age is an example of a \_\_\_\_\_.

Answer: variable

3. In a study, one group receives a drug treatment while the other group does not. The latter is a \_\_\_\_\_ group.

Answer: control

4. Among the types of studies, a(n) \_\_\_\_\_ may be administered through means such as in-person interviews or self-administered questionnaires.

Answer: survey

5. A researcher is analyzing the covers of popular magazines to study the representation of women and different racial and ethnic groups over the years. This is an example of a(n)

Answer: content analysis

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Level: Understand Difficulty: Easy

6. When research is conducted on archival data, this is an example of \_\_\_\_\_\_ research.

Answer: secondary

7. A researcher codes the hair color of study participants as blonde, brown, black, red, white, or other. This is an example of a(n) \_\_\_\_\_\_ variable.

Answer: nominal

8. A researcher collects data about customer satisfaction, using a five-point scale with the categories very dissatisfied, dissatisfied, neutral, satisfied, and very satisfied. This is an example of a(n) \_\_\_\_\_\_ variable.

Answer: ordinal

9. A variable that has equal intervals but does not have a true zero is a(n) \_\_\_\_\_\_ variable.

Answer: interval

10. When using statistics for decision making, a researcher wants to be able to generalize from \_\_\_\_\_\_ to larger populations.

Answer: samples