Test Bank

# Chapter 1: Setting the Stage: Why Learning This Stuff Is Important!

1. Which type of research seeks to identify causes and effects of social phenomena, to predict how a dependent variable will change or vary in response to variation in the independent variable?

a. descriptive

b. explanatory

c. evaluation

d. case study

Ans: B

Answer Location: The Role of Statistical Methods in Criminology and Criminal Justice: Explanatory Research

Cognitive Domain: Comprehension

2. A researcher is analyzing one’s fear of crime and how gender, race, class, and age all have an effect. Which would be the dependent variable?

a. gender

b. class

c. age

d. fear of crime

Ans: D

Answer Location: The Role of Statistical Methods in Criminology and Criminal Justice: Explanatory Research

Cognitive Domain: Application

3. Which of the following would NOT be an example of evaluation research?

a. analyzing the effect the D.A.R.E. program has on students using drugs

b. analyzing a reading intervention program to understand if students’ literacy levels increased

c. Analyzing the concentration of gun crimes in hot spots

d. analyzing the effect of job training and education programs on the likelihood of recidivism by ex-felons

Ans: C

Answer Location: The Role of Statistical Methods in Criminology and Criminal Justice: Evaluation Research

Cognitive Domain: Application

4. A \_\_\_\_\_\_ is a smaller group of data that is selected from a population.

a. microgroup

b. sample

c. subsample

d. sampling error

Ans: B

Answer Location: Populations and Samples

Cognitive Domain: Knowledge

5. What is considered to be the fundamental aspect of probability sampling?

a. populations

b. samples

c. unbiased selection

d. random selection

Ans: D

Answer Location: Populations and Samples

Cognitive Domain: Knowledge

6. Variables that only convey classification or categorization information are at what level of measurement?

a. nominal

b. ordinal

c. interval

d. ratio

Ans: A

Answer Location: Levels of Measurement: Nominal Level of Measurement

Cognitive Domain: Knowledge

7. Variables that we assume can be added and subtracted, as well as multiplied and divided, and have true-zero points are at what level of measurement?

a. nominal

b. interval

c. ratio

d. ordinal

Ans: C

Answer Location: Levels of Measurement: Ratio Level of Measurement

Cognitive Domain: Knowledge

8. Which type of statistic involves collecting, organizing, and summarizing data?

a. inferential

b. experimental

c. descriptive

d. sample

Ans: C

Answer Location: Descriptive and Inferential Statistics

Cognitive Domain: Application

9. The larger the sampling error, the \_\_\_\_\_\_ representative the sample is of the population.

a. less

b. more

c. same

d. better

Ans: A

Answer Location: Descriptive and Inferential Statistics

Cognitive Domain: Application

10. If a researcher is comparing individuals who had and had not ever committed armed assault, an indicator for having ever committed armed assault would be what kind of variable?

a. continuous

b. qualitative

c. ratio

d. binary

Ans: D

Answer Location: Levels of Measurement: The Case of Dichotomies

Cognitive Domain: Comprehension

True/False

1. Population parameters are used to draw inferences about sample statistics?

Ans: F

Answer Location: Descriptive and Inferential Statistics

Cognitive Domain: Knowledge

2. When a researcher seeks to identify the cause and effect of a social phenomenon, they are participating in evaluation research.

Ans: F

Answer Location: The Role of Statistical Methods in Criminology and Criminal Justice: Explanatory Research

Cognitive Domain: Knowledge

3. The true experimental design is a very strong research method for determining the effects of programs or policies.

Ans: T

Answer Location: The Role of Statistical Methods in Criminology and Criminal Justice: Evaluation Research

Cognitive Domain: Knowledge

4. Evaluation research tests theory whereas explanatory research is used to determine whether an implemented program or policy had the intended outcomes.

Ans: F

Answer Location: The Role of Statistical Methods in Criminology and Criminal Justice: Evaluation Research

Cognitive Domain: Knowledge

5. Those who are included in the sample are also included in the population.

Ans: T

Answer Location: Population and Samples

Cognitive Domain: Comprehension

6. *Sampling error* can be defined as the difference between the characteristics of a sample and the characteristics of the population from which it was selected.

Ans: T

Answer Location: Populations and Samples

Cognitive Domain: Knowledge

7. Nonprobability sampling methods allow us to know in advance the likelihood that any element will be selected from the population.

Ans: F

Answer Location: Populations and Samples

Cognitive Domain: Comprehension

8. If a researcher wanted to evaluate the number of burglaries per 1,000 people in Texas in 2015, he would only look at the total number of burglaries in Texas in 2015.

Ans: F

Answer Location: Ways of Presenting Variables: Counts and Rates

Cognitive Domain: Comprehension

9. The unit of analysis is the particular unit or aggregation that constitutes an observation in a data set.

Ans: T

Answer Location: Units of Analysis

Cognitive Domain: Knowledge

10. If a researcher is studying cheating by male and female college students at a large, public university, then the unit of analysis is gender.

Ans: F

Answer Location: Units of Analysis

Cognitive Domain: Comprehension

Short Answer

1. What is descriptive, explanatory and evaluation research? Give two examples of each.

Ans: Answers may vary.

*Descriptive research* describes the social phenomena that the researcher is investigating. Student should then list two examples of descriptive research.

*Explanatory research* seeks to identify causes and effects of social phenomena, to predict how one phenomenon will change or vary in response to variation in some other phenomenon. Student should then give two examples.

*Evaluation research* seeks to determine the effects of a social program, policy, or other type of intervention. Student should then give two examples.

Answer Location: The Role of Statistical Methods in Criminology and Criminal Justice

Cognitive Domain: Comprehension

2. Calculate the rate of crime per 10,000.

|  |  |  |  |
| --- | --- | --- | --- |
| Gender | Number of Crimes | Total Population | Rate per 10,000 |
| Male | 730,300 | 600,000 |  |
| Female | 24,500 | 615,000 |  |

Ans: Male rate = 12,171.67; Female rate = 398.37

Answer Location: Ways of Presenting Variables: Counts and Rates

Cognitive Domain: Application

3. Discuss the different levels of measurement and give an example for each.

Ans: Answers may vary.

*Nominal-level variables* convey classification or categorization information only. Examples include gender, race, religion, political party, city born in, etc.

*Ordinal-level variables* are categorical but the categories have some type of relationship to each other. The categories can be ordered from high to low or low to high but there is no exact quantity between the categories. We know a category is more or less but do not know exactly how much more or less. Examples would include income or age categories, Likert type items, etc.

*Interval-level variables* allow us to quantify the numeric relationship among the categories. The difference between the adjacent values must be the same at every two points. Examples would be age, temperature on the Fahrenheit scale, etc.

*Ratio-level variables* have all the qualities of interval level variable and a true-zero point. A true zero indicates that the phenomenon is absent. Examples would include number of crimes committed, number of times a person was victimized, number of hours worked, etc.

Answer Location: Levels of Measurement

Cognitive Domain: Comprehension

4. What are the differences between descriptive and inferential statistics?

Ans: Answers may vary.

*Descriptive statistics* are used to describe characteristics of some phenomenon from either a sample or a population. *Inferential statistics* estimate how likely it is that statistical results based on a random sample are representative to the entire population. Descriptive statistics describe some characteristic, attribute, or phenomenon while inferential statistics allows one to make inferences to an entire population. Inferential statistics allow for the calculation of the sampling error.

Answer Location: Descriptive and Inferential Statistics

Cognitive Domain: Analysis