Test Bank

Chapter 1: Introduction to the Use of Statistics in Criminal Justice and Criminology

# Multiple Choice

1. The process of gathering and analyzing data in a systematic and controlled way using techniques and procedures that are accepted by other scientists in a discipline is commonly referred to as \_\_\_\_\_\_.

A. speculation

B. counter-intuitive induction

C. science

D. deductive introspection

Ans: C

Cognitive Domain: Comprehension

Answer Location: Science: Basic Terms and Concepts

Difficulty Level: Medium

2. Procedures used by scientists to gather and analyze scientific data are referred to as what?

A. methods

B. modus operandi

C. operational nox

D. formation

Ans: A

Cognitive Domain: Comprehension

Answer Location: Science: Basic Terms and Concepts

Difficulty Level: Medium

3. A hypotheses is best described as \_\_\_\_\_\_.

A. a set of proposed and testable explanations about reality that is bound together by logic and evidence

B. a law governing the coherence of social and criminal phenomena

C. a set of rules governing the application of statistical analytic techniques for examining quantitative data

D. a single proposition, deduced from a theory, that must hold true in order for the theory itself to be considered valid

Ans: D

Cognitive Domain: Comprehension

Answer Location: Types of Scientific Research in Criminal Justice and Criminology

Difficulty Level: Medium

4. Which of the terms below can best be described as a set of proposed and testable explanations about reality that is bound together by logic and evidence?

A. validity

B. hypothesis

C. law

D. theory

Ans: D

Cognitive Domain: Comprehension

Answer Location: Types of Scientific Research in Criminal Justice and Criminology

Difficulty Level: Medium

5. Studies intending to assess whether policies, programs, or interventions are effective are referred to as what style of research?

A. evaluation research

B. exploratory research

C. confounding research

D. matriculation research

Ans: A

Cognitive Domain: Comprehension

Answer Location: Types of Scientific Research in Criminal Justice and Criminology

Difficulty Level: Medium

6. A *sample* can best be described as \_\_\_\_\_\_.

A. the grouping of people, places, and objects used to generalize to the population

B. a subset pulled from a population with the goal of ultimately using the people, objects, or places in the sample as a way to generalize to the population

C. the entire set, or universe, of people, places, or objects used to generalize to a population

D. a technique used by social science researchers in attempts to prove existing theoretical propositions true in the general population

Ans: B

Cognitive Domain: Comprehension

Answer Location: Science: Basic Terms and Concepts

Difficulty Level: Medium

7. In order to ensure that a sample mirrors the population from which it was drawn a scientist would employ which type of sampling technique?

A. quota sampling

B. purposive sampling

C. probability sampling

D. snowball sampling

Ans: C

Cognitive Domain: Comprehension

Answer Location: Types of Scientific Research in Criminal Justice and Criminology

Difficulty Level: Medium

8. Despite suffering from a variety of problems, why is the NCVS considered so useful for research?

A. The NCVS is actually not all that useful because it is replete with methodological errors.

B. The NCVS is useful due to the fact that it facilitates research into the characteristics of crime victims.

C. The NCVS is only useful because it contains files that are quite small and easy to interpret.

D. The NCVS is not useful at all but because it is so widely published, researchers make use of its limited information.  
Ans: B

Cognitive Domain: Comprehension

Answer Location: The National Crime Victimization Survey

Difficulty Level: Medium

9. Two sources of actual, real-world data used in this text are \_\_\_\_\_\_.

A. UCR and NCVS

B. MMPI and BJS

C. ICPSR and MMPI

D. DSM and ICPSR

Ans: A

Cognitive Domain: Comprehension

Answer Location: What Do Criminal Justice and Criminology Researchers Study?

Difficulty Level: Medium

10. Crimes reported within the Uniform Crime Report are sorted into eight index offenses. Which of the following represent those specific indices?

A. aggravated manslaughter, vehicular homicide, pedophilia, human trafficking, drug possession, environmental offenses, piracy, and infanticide

B. terroristic assault, hate crimes, murder, manslaughter, infanticide, patricide, drug offenses, and suicide

C. pedophilia, necrophilia, kidnapping, white-collar crime, airline hijacking, human trafficking, drug trafficking, and traffic offenses

D. homicide, rape, robbery, aggravated assault, burglary, larceny-theft, motor vehicle theft, and arson

Ans: D

Cognitive Domain: Comprehension

Answer Location: The Uniform Crime Reports

Difficulty Level: Medium

11. The organization that is responsible for the collection of data for the Uniform Crime Reports is the \_\_\_\_\_\_.

A. Federal Bureau of Investigation

B. Central Intelligence Agency

C. American University

D. Bureau of Justice Statistics

Ans: A

Cognitive Domain: Comprehension

Answer Location: The Uniform Crime Reports

Difficulty Level: Medium

12. The Uniform Crime Reports conform to the “hierarchy rule,” meaning what?

A. In multiple-crime incidents, only the most serious offense is reported to the UCR.

B. In multiple-crime incidents, every offense is recorded in official records.

C. In multiple-crime incidents, each crime is reported, but the most serious offense is listed first.

D. In all criminal incidents, larger metropolitan law enforcement organizations are given prominence with crimes committed in rural areas listed in special indices of the UCR.

Ans: A

Cognitive Domain: Comprehension

Answer Location: The Uniform Crime Reports

Difficulty Level: Medium

13. The most obvious weakness of the Uniform Crime Report rests on what?

A. The fact that rural crime is too often relegated to lower ranking indices.

B. The fact that only those crimes brought to the attention of the police are included in the database.

C. The fact that the continued use of multistage cluster sampling prevents serious analysis at the individual case level.

D. The fact that the vast majority of data collected and included in the UCR is relegated for use by specially designated federal agents only.

Ans: B

Cognitive Domain: Comprehension

Answer Location: The Uniform Crime Reports

Difficulty Level: Medium

14. The National Crime Victimization Survey is conducted by which agency?

A. The Federal Bureau of Investigation

B. The Central Intelligence Agency

C. The Bureau of the Census

D. The Inter-University Consortium on Political and Social Research

Ans: C

Cognitive Domain: Comprehension

Answer Location: The National Crime Victimization Survey

Difficulty Level: Medium

15. GIGO, an acronym commonly used in both computer science and the discipline of statistics, is used to represent what phrase?

A. Gig In Gig Out

B. Going In Going Out

C. Gang In Gang Out

D. Garbage In Garbage Out

Ans: D

Cognitive Domain: Comprehension

Answer Location: Science: Basic Terms and Concepts

Difficulty Level: Medium

16. Research that does not set out to test a theory or explore a new area of research but proposes to simply report characteristics or aspects of a given phenomenon is referred to as what type of research?

A. evaluation research

B. descriptive research

C. expositional research

D. neo-investigative research

Ans: B

Cognitive Domain: Comprehension

Answer Location: Types of Scientific Research in Criminal Justice and Criminology

Difficulty Level: Medium

17. A sampling technique in which all people, objects, or areas included within a population have an equal and known chance of being selected for inclusion into a sample is known as what type of sampling procedure?

A. purposive sampling

B. snowball sampling

C. probability sampling

D. multistage Cluster sampling

Ans: C

Cognitive Domain: Comprehension

Answer Location: Types of Scientific Research in Criminal Justice and Criminology

Difficulty Level: Medium

18. Which of the following are commonly used statistical packages in the criminal justice sciences?

A. SPSS, STATA, SAS

B. Numbers, Microsoft Excel

C. Run, SigmaPlot, Do, ESRI

D. ADMB, CJEstat, DataPlot

Ans: A

Cognitive Domain: Comprehension

Answer Location: Software Packages for Statistical Analysis

Difficulty Level: Medium

19. Data that are collected improperly or carelessly can be salvaged through which procedure?

A. Improperly collected data cannot be salvaged by high powered statistical operations.

B. The best method to salvage bad data is through data mining.

C. Negative binomial regression can render even the worst data useful.

D. Data imputation can solve all problems associated with bad or “dirty” data.

Ans: A

Cognitive Domain: Comprehension

Answer Location: Science: Basic Terms and Concepts

Difficulty Level: Medium

20. Measures of \_\_\_\_\_\_ complement measures of central tendency by offering information about whether the data tend to cluster tightly around the center or whether they are very spread out.

A. statistics

B. regression

C. sampling

D. dispersion

Ans: D

Cognitive Domain: Comprehension; Application

Answer Location: Organization of the Book

Difficulty Level: Medium

21. With the exception of purely descriptive research, the ultimate goal in most statistical analyses is do what?

A. test a hypothesis

B. generalize from a population to a sample

C. generalize from a sample to a population

D. test a theory

Ans: C

Cognitive Domain: Comprehension

Answer Location: Types of Scientific Research in Criminal Justice and Criminology

Difficulty Level: Medium

22. Nonscientific information is that which is collected \_\_\_\_\_\_.

A. informally

B. without regard for correct methods

C. anecdotally

D. all of these

Ans: D

Cognitive Domain: Comprehension

Answer Location: Science: Basic Terms and Concepts

Difficulty Level: Medium

23. What is the Bureau of Justice Statistics responsible for?

A. evaluating other federal agencies’ use of statistics

B. gathering, maintaining, and analyzing data on various criminal justice topics at the county, state, and national levels

C. calculating statistics for the government to determine public opinion on political matters

D. all of these

Ans: B

Cognitive Domain: Comprehension

Answer Location: What Do Criminal Justice and Criminology Researchers Study?

Difficulty Level: Medium

24. Everybody who conducts a study bears an obligation to \_\_\_\_\_\_.

A. be very clear and open about the methods they used

B. provide brief outlines on the procedures used

C. conform to at least some of the proper scientific methods

D. all of these

Ans: A

Cognitive Domain: Comprehension

Answer Location: Science: Basic Terms and Concepts

Difficulty Level: Medium

25. Studies using \_\_\_\_\_\_ statistical analyses do not contribute to theory and research or to policy.

A. scientific

B. rigorous

C. flawed

D. none of these

Ans: C

Cognitive Domain: Comprehension

Answer Location: Science: Basic Terms and Concepts

Difficulty Level: Medium

26. \_\_\_\_\_\_ are small pieces of theories.

A. Studies

B. Hypotheses

C. Laws

D. None of these

Ans: B

Cognitive Domain: Comprehension

Answer Location: Science: Basic Terms and Concepts

Difficulty Level: Medium

27. \_\_\_\_\_\_ sampling hopes to ensure that a sample mirrors the population from which is was drawn.

A. Nonprobability

B. Probability

C. Snowball

D. None of these

Ans: B

Cognitive Domain: Comprehension

Answer Location: Types of Scientific Research in Criminal Justice and Criminology

Difficulty Level: Medium

28. The \_\_\_\_\_\_ software package is best for extremely large data sets.

A. SPSS

B. SAS

C. Stata

D. none of these

Ans: B

Cognitive Domain: Comprehension

Answer Location: Software Packages for Statistical Analysis

Difficulty Level: Medium

29. The \_\_\_\_\_\_ software package is known for its simplicity and ease of use.

A. SPSS

B. SAS

C. Stata

D. none of these

Ans: A

Cognitive Domain: Comprehension

Answer Location: Software Packages for Statistical Analysis

Difficulty Level: Medium

30. The \_\_\_\_\_\_ software package is excellent for regression modeling.

A. SPSS

B. SAS

C. Stata

D. none of these

Ans: C

Cognitive Domain: Comprehension

Answer Location: Software Packages for Statistical Analysis

Difficulty Level: Medium

31. Measure of \_\_\_\_\_\_ complement measures of central tendency.

A. dispersion

B. redundancy

C. usefulness

D. none of these

Ans: A

Cognitive Domain: Comprehension

Answer Location: Organization of the Book

Difficulty Level: Medium

32. Statistics are \_\_\_\_\_\_ in that many of the concepts you learn at the beginning form the building blocks for more complex techniques.

A. repetitive

B. abstract

C. cumulative

D. none of these

Ans: C

Cognitive Domain: Comprehension

Answer Location: Organization of the Book

Difficulty Level: Medium

33. \_\_\_\_\_\_ is the key to learning statistics.

A. Replication

B. Adding and subtracting

C. Multiplying

D. None of these

Ans: A

Cognitive Domain: Comprehension

Answer Location: Organization of the Book

Difficulty Level: Medium

34. \_\_\_\_\_\_ are smaller than populations.

A. Studies

B. Samples

C. Parameters

D. none of these

Ans: B

Cognitive Domain: Comprehension

Answer Location: Types of Scientific Research in Criminal Justice and Criminology

Difficulty Level: Medium

35. Data sets from \_\_\_\_\_\_ software package are available for download to accompany your course textbook.

A. SPSS

B. SAS

C. Stata

D. none of these

Ans: A

Cognitive Domain: Comprehension

Answer Location: Software Packages for Statistical Analysis

Difficulty Level: Medium

# True/False

1. Before a theory can be considered valid, it is first necessary that the hypothesis upon which it is built holds true.

Ans: T

Cognitive Domain: Comprehension

Answer Location: Types of Scientific Research in Criminal Justice and Criminology

Difficulty Level: Medium

2. A key aspect of scientific research is replication, conducted for purposes of determining whether the original study’s results are reproduced when different samples are used.

Ans: T

Cognitive Domain: Comprehension

Answer Location: Science: Basic Terms and Concepts

Difficulty Level: Medium

3. According to the scientific method, it is vital to the integrity of a discipline that a researcher maintains strict secrecy with respect to the methods, samples, and techniques used in the analysis of data within any particular study.

Ans: F

Cognitive Domain: Comprehension

Answer Location: Science: Basic Terms and Concepts

Difficulty Level: Medium

4. Evaluation research is rarely conducted within the fields of criminal justice or criminology due to its inherent tendency to produce unreliable and often invalid results.

Ans: F

Cognitive Domain: Comprehension

Answer Location: Types of Scientific Research in Criminal Justice and Criminology

Difficulty Level: Medium

5. Research conducted by social scientists treading into unfamiliar territory when there is limited knowledge regarding a certain phenomenon is referred to as “exploratory” research.

Ans: T

Cognitive Domain: Comprehension

Answer Location: Types of Scientific Research in Criminal Justice and Criminology

Difficulty Level: Medium

6. In most statistical analyses, the underlying purpose is to generalize from a population to a sample in order to provide the social science community with the best fitting data and results.

Ans: F

Cognitive Domain: Comprehension

Answer Location: Types of Scientific Research in Criminal Justice and Criminology

Difficulty Level: Medium

7. The most highly prized statistical package used by researchers in the social sciences is Microsoft Excel due to its ability to perform high powered analytic procedures quickly and efficiently.

Ans: F

Cognitive Domain: Comprehension; Application

Answer Location: Software Packages for Statistical Analysis

Difficulty Level: Medium

8. Learning statistics is a cumulative process because the concepts build upon each other, with the more basic analyses providing building blocks for the more complex ones.

Ans: T

Cognitive Domain: Comprehension

Answer Location: Organization of the Book

Difficulty Level: Medium

9. In order to be a successful student of statistics, a strong base of knowledge in arithmetic and basic algebra is necessary.

Ans: T

Cognitive Domain: Comprehension; Application

Answer Location: Organization of the Book

Difficulty Level: Medium

10. Statistical methods are the backbone of criminal justice research and enable the construction and expansion of knowledge about criminality and the criminal justice system.

Ans: T

Cognitive Domain: Comprehension

Answer Location: Introduction to the Use of Statistics in Criminal Justice and Criminology

Difficulty Level: Medium

11. The Bureau of Justice Statistics is an important source of data and information on the criminal justice system.

Ans: T

Cognitive Domain: Comprehension

Answer Location: What Do Criminal Justice and Criminology Researchers Study?

Difficulty Level: Medium

12. Research that tests theories or examines issues related to criminal justice and is ultimately published in academic journals and books is the basis for most of what is known about criminal offending and the justice system.

Ans: T

Cognitive Domain: Comprehension

Answer Location: Introduction to the Use of Statistics in Criminal Justice and Criminology

Difficulty Level: Medium

13. It is better to rely on the personal opinions and observations of people who have worked within the criminal justice system for a long time than on data gathered using scientific methods and analyzed with statistics.

Ans: F

Cognitive Domain: Comprehension; Application

Answer Location: Science: Basic Terms and Concepts

Difficulty Level: Medium

14. Science is grounded in theory.

Ans: F

Cognitive Domain: Comprehension

Answer Location: Science: Basic Terms and Concepts

Difficulty Level: Medium

15. A hypothesis must hold true in order for the theory itself to be considered valid.

Ans: T

Cognitive Domain: Comprehension

Answer Location: Types of Scientific Research in Criminal Justice and Criminology

Difficulty Level: Medium

16. Exploratory research occurs when there is limited knowledge about a certain phenomenon and researchers embark into unfamiliar territory as they attempt to study this social event.

Ans: T

Cognitive Domain: Comprehension

Answer Location: Types of Scientific Research in Criminal Justice and Criminology

Difficulty Level: Medium

17. The National Crime Victimization Survey contain annual data collected by the federal government on crimes reported to police agencies nationwide.

Ans: F

Cognitive Domain: Comprehension

Answer Location: The Uniform Crime Reports

Difficulty Level: Medium

18. Replication is repetition of a particular study that is conducted for purposes of determining whether the original study’s results remain true when new samples or measures are employed.

Ans: T

Cognitive Domain: Comprehension

Answer Location: Science: Basic Terms and Concepts

Difficulty Level: Medium

19. A focus group is a subset pulled from a population with the goal of using the people, objects, or places to make generalizations to that population.

Ans: F

Cognitive Domain: Comprehension

Answer Location: Science: Basic Terms and Concepts

Difficulty Level: Medium

20. Theories are proposed explanations for certain events.

Ans: T

Cognitive Domain: Comprehension

Answer Location: Types of Scientific Research in Criminal Justice and Criminology

Difficulty Level: Medium

# Essay

1. Describe the various problems afflicting the Uniform Crime Reports.

Ans: (1) The UCR only includes those crime that have been brought to the attention of the police. Crimes that fail to be reported or are not detected by the police are not included in the UCR database. (2) The UCR conforms to the hierarchy rule, meaning that in instances in which multiple crimes are perpetrated, only the most serious offense is reported in the database; therefore, many criminal offenses are not included in the federal crime data. (3) Underreporting of crime by victims, combined with the hierarchy rule, is evidence that the UCR undercounts the true amount of crime that has actually occurred.

Cognitive Domain: Application

Answer Location: The Uniform Crime Reports

Difficulty Level: Medium

2. Explain briefly why replication is vital to scientific inquiry. Include in your answer an explanation of the role that clarity and transparency of methods plays in replication.

Ans: Due to the fact that scientific studies within the social sciences never actually prove anything, a good amount of additional study is necessary to provide ample evidence that results obtained are generalizable, valid, and reliable. Firm conclusions can only be drawn once subsequent studies have verified results obtained in previous research endeavors. Full replication of scientific studies is possible through the scientific method’s requirement that researchers fully divulge the methods and procedures used in their studies.

Cognitive Domain: Comprehension; Application

Answer Location: Science: Basic Terms and Concepts

Difficulty Level: Medium

3. What are the differences between theories and hypotheses?

Ans: A theory is defined as a set of proposed and testable explanations about reality that is bound together by logic and evidence. A hypothesis is defined as a single proposition deduced from a theory that must hold true in order for the theory itself to be considered valid. Hypotheses can be understood as small bits of theories that must be true in order for the entire theory to hold up under scrutiny. In addition, one might envision a theory as a chain with the hypotheses forming the links of that chain. A theory is broad, whereas a hypothesis is a smaller entity.

Cognitive Domain: Comprehension; Application

Answer Location: Types of Scientific Research in Criminal Justice and Criminology

Difficulty Level: Medium

4. What is the relationship between science and methods?

Ans: Science is the process of gathering and analyzing data in a systematic and controlled manner using procedures and techniques that are generally accepted by others in a discipline. Methods are those procedures that are used in the task of gathering the desired data.

Cognitive Domain: Application

Answer Location: Science: Basic Terms and Concepts

Difficulty Level: Medium

5. List the four types of research discussed in this chapter.

Ans: The four types of research discussed in this chapter are hypothesis testing, evaluation research, exploratory research, and descriptive research.

Cognitive Domain: Application

Answer Location: Types of Scientific Research in Criminal Justice and Criminology

Difficulty Level: Medium