

***Psychology From Inquiry to Understanding 5th
edition Lilienfeld Test Bank***

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Chapter 2: Research Methods

Total Assessment Guide

Topic		Remember the Facts	Understand the Concepts	Apply What You Know
Quick Quiz 1	Multiple Choice	1, 7, 9	6, 10	2, 3, 4, 5, 8
Quick Quiz 2	Multiple Choice	1, 3, 6, 9	10	2, 4, 5, 7, 8
Introduction and Learning Objective 2.1a Identify two modes of thinking and their application to scientific reasoning.	Multiple Choice	6, 8,	1, 2, 4, 5, 9, 14	3, 7, 10, 11, 12, 13,
	Fill-in-the-Blank	1–2		
	Essay			
	Critical Thinking			
Learning Objective 2.2a Explain the importance of openness and transparency in psychological research.	Multiple Choice	18, 21, 24, 30, 33, 34, 40	15, 17, 36	16, 19, 20, 22, 23, 25, 26, 27, 28, 29, 31, 32, 35, 37, 38, 39, 41, 42
	Fill-in-the-Blank		4, 6	3, 5
	Essay			
	Critical Thinking			
Learning Objective 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.	Multiple Choice	46, 50, 54	43, 44, 45, 47, 48, 52, 55, 57	49, 51, 53, 56, 58, 59, 60
	Fill-in-the-Blank	7, 9	8, 10	
	Essay			1, 2
	Critical Thinking			
Learning Objective 2.2c Describe the role of correlational designs and distinguish correlation from causation.	Multiple Choice	62, 70, 75, 79, 84, 85	65, 73, 86	61, 63, 64, 66, 67, 68, 69, 71, 72, 74, 76, 77, 78, 80, 81, 82, 83
	Fill-in-the-Blank	11–13, 17	14, 16	15
	Essay			1
	Critical Thinking			
Learning Objective 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.	Multiple Choice	87, 89, 93, 98, 99, 100, 107, 111, 114, 118, 120, 121, 123	91, 109, 113, 124, 125	88, 90, 92, 94, 95, 96, 97, 101, 102, 103, 104, 105, 106, 108, 110, 112, 115, 116, 117, 119, 122, 126, 127, 128
	Fill-in-the-Blank			
	Essay	3		
	Critical Thinking			
Learning Objective 2.3a Explain the ethical obligations of researchers toward their research participants.	Multiple Choice	129, 131, 134	132, 133	130, 135, 136, 137, 138, 139
	Fill-in-the-Blank	18		
	Essay	3		
	Critical Thinking			

Topic		Remember the Facts	Understand the Concepts	Apply What You Know
Learning Objective 2.3b Describe both sides of the debate on the use of nonhuman animals as research subjects.	Multiple Choice	140	142, 143	141
	Fill-in-the-Blank			
	Essay		4	
	Critical Thinking			
Learning Objective 2.4a Identify uses of various measures of central tendency and variability.	Multiple Choice	144, 145, 146 147, 157, 158, 159	148, 152, 155, 156	149, 150, 151, 153, 154, 160
	Fill-in-the-Blank	23	21	19, 20, 22
	Essay			5
	Critical Thinking		1	
Learning Objective 2.4b Explain how inferential statistics can help us to determine whether we can generalize from our sample to the population.	Multiple Choice	162, 164	163, 165, 166	161, 167, 168
	Fill-in-the-Blank			
	Essay			
	Critical Thinking			
Learning Objective 2.4c Show how statistics can be misused for the purpose of persuasion.	Multiple Choice		170	169
	Fill-in-the-Blank			
	Essay			
	Critical Thinking			
Learning Objective 2.5a Identify flaws in research designs and how to correct for them.	Multiple Choice	171, 173		172, 174
	Fill-in-the-Blank	24		
	Essay			
	Critical Thinking			
Learning Objective 2.5b Identify skills for evaluating psychological claims in the popular media.	Multiple Choice	181, 182	176, 178, 179	175, 177, 180
	Fill-in-the-Blank		26	25
	Essay		6	
	Critical Thinking			

Name _____

Chapter 2 Quick Quiz 1

1. The degree to which a measure assesses what it claims to measure is _____.
 A) reliability
 B) confirmation bias
 C) generalizability
 D) validity
2. Dr. Potter, an English professor, is curious about his students' attitudes toward one of his favorite books. What research method is he most likely to use to gather this information?
 A) survey
 B) case study
 C) experiment
 D) naturalistic observation
3. Dr. Levine wants to show the results of his study to other researchers. He has investigated the relationship between alcohol consumption and reaction time on a motor skill. He has found that as alcohol consumption increases, so does reaction time. It would be best for him to use a _____ to represent his results.
 A) bar graph
 B) frequency polygon
 C) histogram
 D) scatterplot
4. Ryan, a professional bass fisherman, is trying to determine which lure is most effective on Wakeby Lake—the plastic worm he normally uses, or the new minnow-style lure he bought yesterday. Based on this scenario, what would constitute the control?
 A) the new minnow lure
 B) the plastic worm
 C) neither the minnow lure nor the plastic worm
 D) there is no control
5. Dr. Ogilvy conducts an experiment to see if a new teaching technique improves recall of information. Her control group receives the old method of teaching, and the experimental group receives the new method of teaching. After the learning period, both groups are given a quiz covering the material taught to them through the different methods of teaching. In this experiment, the two different teaching techniques is the _____ variable.
 A) control
 B) dependent
 C) operational
 D) independent
6. Students of psychology are often frustrated because there are very few, if any, clear-cut answers to many of their questions. What is the primary limiting factor in obtaining firsthand knowledge of questions such as the long-term effects of child abuse or the effects of smoking marijuana on a pregnancy?
 A) Most people in the general public are not concerned with these issues.
 B) It is difficult to find people who are victims of abuse or mothers who smoke marijuana during pregnancy.
 C) Ethical guidelines in research prevent psychologists from carrying out many of these studies.
 D) Institutional review boards encourage participation in studies that may be harmful to participants either mentally or physically.
7. Which of the following is one of the two types of statistics that researchers use to analyze the data that they collect?
 A) predictive statistics
 B) constrictive statistics
 C) descriptive statistics
 D) computational statistics

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

8. A therapist wishes to show that his new therapy is a marked improvement over the current best available therapy. To do so, he examines the number of participants who improved with each. A total of 125 participants received his treatment (and 100 of them improved). A total of 80 participants received the alternative treatment (and 64 of them improved). What should the therapist conclude?

- A) His treatment is superior to the alternative because 100 is greater than 64.
- B) His treatment is no better than the alternative because the percentages are the same.
- C) His treatment is inferior because the percentages are the same.
- D) His treatment is superior because it included 125 people as opposed to 80.

9. A mechanism by which experts in a field carefully screen the work of their colleagues is known as _____.

- A) experimental validity
- B) experimenter bias effect
- C) peer review
- D) peer assessment

10. A major limitation in reading about the results of psychological research in the newspaper is that _____.

- A) reporters provide too much detailed information about the research study that the general public cannot comprehend in their articles
- B) reporters are so well trained to discuss research that they cannot easily communicate about it with the average lay person
- C) reporters create controversy where none exists by treating scientific evidence and dissenter's biased opinions as equally compelling
- D) reporters do not know how to identify experts to interview for many of their stories, and end up unintentionally misleading the public

Chapter 2 Quick Quiz 1 Answer Key

1. D Explanation: Validity is “truth in advertising.” (Scientific Methodology: A Toolbox of Skills, Remember the Facts, APA LO 2.1, TEXT LO 2.2a)
2. A Explanation: The survey method is most appropriate when we are interested in people’s attitudes or opinions. (Scientific Methodology: A Toolbox of Skills, Apply What You Know, APA LO 1.3, TEXT LO 2.2b)
3. D Explanation: Scatterplots give an overall image of the correlation between variables. (Topic: Scientific Methodology: A Toolbox of Skills, Apply What You Know, APA LO 1.1, TEXT LO 2.2c)
4. B Explanation: A control receives no manipulation in an experiment. In this case, normal use of the plastic worm suggests lack of manipulation. (Scientific Methodology: A Toolbox of Skills, Apply What You Know, APA LO 1.3, TEXT LO 2.2d)
5. D Explanation: The independent variable is sometimes referred to as the manipulated variable. (Scientific Methodology: A Toolbox of Skills, Apply What You Know, APA LO 1.1, TEXT LO 2.2d)
6. C Explanation: Due to ethical considerations, we cannot randomly assign children to abusive or nonabusive homes, for example. Thus, it is impossible to say whether A causes B, in many cases. (Ethical Issues in Research Design, Understand the Concepts, APA LO 3.1, TEXT LO 2.3a)
7. C Explanation: Descriptive and inferential statistics are the two basic types that are used in psychology. (Statistics: The Language of Psychological Research, Remember the Facts, APA LO 1.1, TEXT LO 2.4a)
8. B Explanation: He has found the same probability in both cases, so there is no statistical difference between the two participant groups. (Statistics: The Language of Psychological Research, Apply What You Know, APA LO 1.3, TEXT LO 2.4b)
9. C Explanation: Peer review is one of the most important safeguards against the dissemination of inappropriate or invalid research. (Evaluating Psychological Research, Remember the Facts, APA LO 1.1, TEXT LO 2.5a)
10. C Explanation: This is an important point to make, because those without basis for opinions are often given the same weight as those who do have scientific basis for opinions. (Evaluating Psychological Research, Understand the Concepts, APA LO 1.3, TEXT LO 2.5b)

Name _____

Chapter 2 Quick Quiz 2

1. Which Nobel Prize–winning psychologist proposed the idea that there are two different types of thinking systems, one that works intuitively and another that works analytically?

- A) Kahneman
B) Piaget
C) Newman
D) Zarski

2. Sarah, a graduate student in psychology, just heard about a five-year-old child who has already learned calculus. She is thinking about doing an in-depth study of the child for her dissertation because such early-life math skill is so rare. Sarah is considering which research method?

- A) naturalistic observation
B) experiment
C) independent study
D) case study

3. The perception of a statistical association between two variables where none exists is known as _____.

- A) confirmation bias
B) illusory correlation
C) existence proof
D) Type I error

4. Dr. Johansen randomly assigned research participants to three different groups during her last experiment. She then proceeded to give all the participants in the experiment a new study technique designed to enhance their learning for the upcoming test. What critical error did she make during her experiment?

- A) She failed to identify the independent variable.
B) She failed to identify the dependent variable.
C) She failed to include an experimental group.
D) She failed to include a control group.

5. Dr. Kripnick is studying the impact of nutrition on learning. To conduct the experiment, he takes a sample of his population and exposes one randomly selected group to a high sugar diet, while the second group gets a balanced diet. He then provides a lecture on the Civil War and gives everyone an exam after the lecture. In this case, scores on the exam is the _____ variable.

- A) causal
B) confounding
C) dependent
D) independent

6. What is the purpose of an institutional review board?

- A) to help protect research participants from abuse
B) to hinder the research process by placing unnecessary hurdles in the way of researchers
C) to help protect the university from lawsuits from unhappy research participants
D) to encourage the use of deception in medical and psychological research with humans

7. In which situation would presenting the mean as one's measure of central tendency be least accurate?

- A) when the distribution is normally distributed
B) when the distribution is negatively skewed
C) when the distribution is bimodal
D) when there are many scores in the data set

8. After carefully observing thousands of students, Dr. O'Brien revealed to his colleagues that students with brown eyes are statistically more likely to write with pens instead of pencils. Although his colleagues did not question his statistics, they did suggest that a finding such as this lacked _____.

- A) authenticity
B) standardization
C) statistical measures
D) practical significance

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

9. The peer review process is designed to _____.
- A) block alternative therapies from being made available to the general public
 - B) identify flaws in a research study's methods, findings, and conclusions
 - C) make researchers feel bad when their article is not published
 - D) place obstacles in front of people whose theories differ from mainstream science
10. A key factor to consider when reading about the results of a study on the Internet, in a newspaper, or in a news magazine is to _____.
- A) consider the source of the information
 - B) determine how well it fits with what others have told you in the past
 - C) rely on your common sense or "gut" intuition
 - D) popular media outlets always have inaccurate information

Chapter 2 Quick Quiz 2 Answer Key

1. A Explanation: Daniel Kahneman was the psychologist who proposed this idea. (The Beauty and Necessity of Good Research Design, Remember the Facts, APA LO 1.1, TEXT LO 2.1a)
2. D Explanation: Case studies involve in-depth analyses of one or a few participants. (Scientific Methodology: A Toolbox of Skills, Apply What You Know, APA LO 1.3, TEXT LO 2.2b)
3. B Explanation: We often fall victim to this illusion, even when no relationship has been shown to truly exist. (Scientific Methodology: A Toolbox of Skills, Remember the Facts, APA LO 1.1, TEXT LO 2.2c)
4. D Explanation: In an experiment, we need to ensure that there is a group that receives the “active” treatment and a group that receives a “placebo” treatment (in this case, a study technique that has already been tested). (Scientific Methodology: A Toolbox of Skills, Apply What You Know, APA LO 1.3, TEXT LO 2.2d)
5. C Explanation: This variable is sometimes called the outcome variable, or the measured variable. (Scientific Methodology: A Toolbox of Skills, Apply What You Know, APA LO 1.1, TEXT LO 2.2d)
6. A Explanation: IRBs represent a very important line of defense against intentional or unintentional abuse or harming of research participants. (Ethical Issues in Research Design, Remember the Facts, APA LO 3.1, TEXT LO 2.3a)
7. B Explanation: The mean is adversely affected by positively or negatively skewed data sets. (Statistics: The Language of Psychological Research, Analyze It, APA LO 1.3, TEXT LO 2.4a)
8. D Explanation: Practical significance refers to whether a statistical difference “makes a difference” in the real world. (Statistics: The Language of Psychological Research, Apply What You Know, APA LO 1.3, TEXT LO 2.4b)
9. B Explanation: It is important to have one’s peers put “objective eyes” on research to make sure that it is as free from errors and biases as possible. (Evaluating Psychological Research, Remember the Facts, APA LO 1.1, TEXT LO 2.5a)
10. A Explanation: Correct. One must always consider the source from which information is drawn. (Evaluating Psychological Research, Understand the Concepts, APA LO 1.3, TEXT LO 2.5b)

Chapter 2: Research Methods

Test Bank

Multiple Choice

1. Your textbook discusses the issue of facilitated communication and its applicability to assisting children with autism spectrum disorder. One possibility for the early research results was that the children were communicating through the adults who were assisting them. As the text notes, another explanation for the miraculous findings was that the “facilitators” were simply guiding the hands of the children to communicate things that their parents would want to hear. This alternate explanation is consistent with the concept of _____.

A) replicability

Incorrect. Though replication of early findings was a problem for the issue of facilitated communication, it is not the answer to this particular question.

B) ruling out rival hypotheses

Correct. Before we accept a given explanation as accurate, we have to ask whether there are other feasible explanations that can better account for a given phenomenon.

C) falsifiability

D) correlation vs. causation

Answer: B

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 2.1

TEXT LO: Introduction

Topic: Introduction

2. What is one take home message from the discussion of autism and facilitated communication?

A) Children with autism spectrum disorder want to communicate with their parents but need someone to facilitate the process.

B) In almost all cases researched, the data failed to support the idea that facilitated communication was truly effective.

Correct. Your authors note that in nearly 100% of cases tested, the picture flashed to the facilitator was the word typed.

C) Psychological research is dangerous because it allows anyone to find support for any idea or opinion.

Incorrect. While this may be true in some cases, this is not the prevailing message that the authors are trying to convey.

D) The scientific method is not an effective means for finding solutions for persons who live with autism and other psychological disorders.

Answer: B

Difficulty Level: Difficult

Skill: Understand the Concepts

APA LO: 1.3

TEXT LO: Introduction

Topic: Introduction

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

3. Contradicting years of theory and practice, Douglas Biklen claimed that children with autism spectrum disorder could, in fact, communicate with the aid of a “facilitator.” With his help, these children gave messages of love and warmth to their parents, many of whom had been without such affection since their children were born. When the evidence of this “facilitated communication” is examined, which principle of critical thinking from your chapter is not supported?

- A) Occam’s Razor
- B) correlation vs. causation
- C) falsifiability

Incorrect. In this case, the claims were falsifiable as demonstrated by ongoing research.

- D) extraordinary claims

Correct. The extraordinary claims that children with autism spectrum disorder could suddenly be given an avenue to communicate effectively was belied by the research evidence, which showed facilitated communication to be without validity of any kind.

Answer: D

Difficulty Level: Difficult

Skill: Analyze It

APA LO: 2.1

TEXT LO: Introduction

Topic: Introduction

4. The discussion on the topic of facilitated communication demonstrated the importance of which critical component of critical thinking?

- A) developing falsifiable hypotheses
- B) parsimonious theories
- C) replication of earlier research findings
- D) ruling out rival hypotheses

Incorrect. In this case, the claims were falsifiable as demonstrated by ongoing research.

Correct. As it turned out, research demonstrated that facilitated communication had no true research validity, and an alternate explanation was needed. That explanation was that the “facilitators” were actually the ones doing the communicating, not the children with autism spectrum disorder.

Answer: D

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 2.1

TEXT LO: Introduction

Topic: Introduction

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

5. The use of the prefrontal lobotomy was, for quite some time, regarded as a miracle treatment for people suffering from schizophrenia and other mental illnesses. The amazing nature of this treatment was not, however, supported by research into its effectiveness. Which concept of critical thinking is important to consider in this example?

A) correlation vs. causation

B) replicability

Incorrect. Because there was no scientific research that supported the claims of the effectiveness of the lobotomy, there would be nothing to be replicated. Therefore this answer is not the best choice.

C) Occam's Razor

D) extraordinary claims

Correct. Remember that extraordinary claims, including "miracle cures," must be supported by extraordinary evidence. That evidence was sorely lacking in the case of the prefrontal lobotomy.

Answer: D

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.3

TEXT LO: 2.1a Identify two modes of thinking and their application to scientific reasoning.

Topic: The Beauty and Necessity of Good Research Design

6. Once controlled research studies were conducted on the effectiveness of prefrontal lobotomies, they were discovered to be _____.

A) slightly effective

B) sometimes effective, sometimes not

C) universally effective

D) essentially useless

Answer: D

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 2.2

TEXT LO: 2.1a Identify two modes of thinking and their application to scientific reasoning.

Topic: The Beauty and Necessity of Good Research Design

7. You enter a dark alley where you observe two men standing by the side of the alley smoking and whispering to each other. Without thinking, you start whistling and walk really fast to get past them. You clearly relied on a rule of thumb idea that people whispering in the dark are up to no good when you decided to rush past. This rule of thumb belief is also referred to as a _____.

A) strategy

Incorrect. While a strategy is a plan of action, it is not always dependent on a rule of thumb belief.

B) heuristic

Correct. A heuristic is a mental shortcut or rule of thumb that helps us to streamline our thinking and make sense of our world.

C) representation

D) deliberation

Answer: B

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.1

TEXT LO: 2.1a Identify two modes of thinking and their application to scientific reasoning.

Topic: The Beauty and Necessity of Good Research Design

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

8. A mental shortcut that helps us to streamline our thinking and make sense of our world is called a _____.

- A) theory
- B) heuristic
- C) schema
- D) mental reference

Answer: B

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.1a Identify two modes of thinking and their application to scientific reasoning.

Topic: The Beauty and Necessity of Good Research Design

9. Which Nobel Prize–winning psychologist proposed the idea that there are two different types of thinking systems, one that works intuitively and another that works analytically?

- A) Kahneman

Correct. Daniel Kahneman was the psychologist who proposed this idea.

- B) Piaget

Incorrect. Piaget's contributions to cognitive theory do not include these ideas.

- C) Newman

- D) Zarski

Answer: A

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.1

TEXT LO: 2.1a Identify two modes of thinking and their application to scientific reasoning.

Topic: The Beauty and Necessity of Good Research Design

10. System 1 thinking tends to be _____, whereas System 2 thinking is _____.

- A) divergent; convergent

Incorrect. Divergent thinking would be represented by brainstorming, which is not a characteristic of System 1 thinking.

- B) automatic; intuitive

- C) intuitive; analytical

Correct. System 1 thinking is intuitive, and System 2 thinking is analytical and tends to override intuitive thinking.

- D) deliberate; intuitive

Answer: C

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.1

TEXT LO: 2.1a Identify two modes of thinking and their application to scientific reasoning.

Topic: The Beauty and Necessity of Good Research Design

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

11. Katarina needs to buy a new car. While she would like to buy the Toyota because of its color, she thinks more slowly and reflectively on the idea and decides instead on the Honda. Katarina is using _____ thinking.

- A) automatic
- B) delayed
- C) System 1

Incorrect. System 1 thinking is automatic and might be considered impulsive.

- D) System 2

Correct. System 2 thinking is analytical and allows an individual to carefully reflect on their options.

Answer: D

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.1

TEXT LO: 2.1a Identify two modes of thinking and their application to scientific reasoning.

Topic: The Beauty and Necessity of Good Research Design

12. Vlasik is needing to buy a new car. When he is driving around during the day, he sees a lot of Subarus. When his friend asks him what kind of car he wants to buy, he instantly answers "a Subaru." Vlasik is using _____ thinking.

- A) critical
- B) System 1

Correct. System 1 thinking is intuitive or automatic.

- C) System 2

Incorrect. System 2 thinking is reflective and analytical.

- D) analytical

Answer: B

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.1

TEXT LO: 2.1a Identify two modes of thinking and their application to scientific reasoning.

Topic: The Beauty and Necessity of Good Research Design

13. When Anya sees an item at the toy store, she buys it without thinking. Her intuition tells her that her daughter will love it as a Christmas gift. This is an example of _____ thinking in Daniel Kahneman's model.

- A) divergent
- B) convergent
- C) System 2

Incorrect. System 2 thinking is analytical and deliberate.

- D) System 1

Correct. System 1 thinking is intuitive and somewhat automatic.

Answer: D

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.1a Identify two modes of thinking and their application to scientific reasoning.

Topic: The Beauty and Necessity of Good Research Design

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

14. Stopping to take time, consider all of the details, and make a well-reasoned and careful decisions are all features that typify Daniel Kahneman's _____ thinking.

A) System 2

Correct. System 2 thinking is analytical and deliberate.

B) functional

C) System 1

Incorrect. System 1 thinking is intuitive and somewhat automatic.

D) introspective

Answer: A

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.1

TEXT LO: 2.1a Identify two modes of thinking and their application to scientific reasoning.

Topic: The Beauty and Necessity of Good Research Design

15. When a researcher tests her or his hypothesis, she or he is often hoping to gather information that is consistent with a particular theory. What, more specifically, allows a researcher to say that she or he has "proven" a theory?

A) Any time a hypothesis is confirmed, a theory is automatically "proven."

Incorrect. Recall from your chapter that a true theory cannot be proven. It simply stands as the best model, based on the available data, until a better model replaces it.

B) Any time a hypothesis confirms one theory and simultaneously disconfirms at least one other theory, a theory has been "proven."

C) Any time a hypothesis confirms one theory and simultaneously disconfirms all other known theories, a theory has been "proven."

D) A researcher is never really able to say that she or he has "proven" a theory.

Correct. Recall from your chapter that a true theory cannot be proven. It simply stands as the best model, based on the available data, until a better model replaces it.

Answer: D

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 2.1

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

16. Which of the following is one of the questions that a researcher should ask herself before conducting a research study?

A) "How can I avoid using statistics to analyze my results?"

B) "What research methods should I use to test my idea?"

Correct. In fact, this should be one of the first questions asked after the idea has been formulated.

C) "Will I be able to prove my hypothesis?"

Incorrect. Recall from your chapter that a true theory cannot be proven. It simply stands as the best model, based on the available data, until a better model replaces it.

D) "How can I guarantee that I obtain subjective results?"

Answer: B

Difficulty Level: Moderate

Skill: Analyze It

APA LO: 1.3

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

17. According to your text authors, what do researchers in psychology use to try to avoid making errors and get an accurate view of the world?

A) peer review

Incorrect. Peer review is an important part of the research and publishing process, but this is not the best answer to the question.

B) local and state laws regarding research methodologies

C) statistics

D) a variety of scientific methods

Correct. As your text notes, there is not one single scientific method but rather a "toolbox" of different scientific strategies.

Answer: D

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.3

TEXT LO: 2.2a Explain the importance of openness and transparency in psychological research.

Topic: Scientific Methodology: A Toolbox of Skills

18. Through _____, every person in the population has an equal chance of being chosen to participate in the study.

A) random selection

B) surveys

C) reliability measures

D) validity measures

Answer: A

Difficulty Level: Easy

Skill: Remember the Facts

APA LO 1.3

TEXT LO: 2.2a Explain the importance of openness and transparency in psychological research.

Topic: Scientific Methodology: A Toolbox of Skills

19. Dr. Malinois uses random selection in her study to investigate the effects of stress on health.

Because she is using random selection, these results should be more _____ than if she chose not to use random selection.

A) reliable

Incorrect. Reliability refers to the consistency of measurement being used in the experiment.

B) valid

C) generalizable

Correct. Random selection does lead to the ability to generalize more easily to the population.

D) replicable

Answer: C

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO 1.3

TEXT LO: 2.2a Explain the importance of openness and transparency in psychological research.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

20. Dr. Wilcoxon conducts a study using a questionnaire that measures aggression. Just to be sure he has confidence in his data, he also has observers watch people who participate in his study and rate their levels of aggression as they wait in a long line to turn in their questionnaire. Dr. Wilcoxon is trying to confirm the _____ of his questionnaire.

A) reliability

Incorrect. Reliability is a measure of how consistent an experimental measure is.

B) validity

Correct. Validity is the extent to which a measure assesses what it claims to measure.

C) generalizability

D) replicability

Answer: B

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO 1.3

TEXT LO: 2.2a Explain the importance of openness and transparency in psychological research.

Topic: Scientific Methodology: A Toolbox of Skills

21. _____ refers to the consistency of measurement in a study.

A) Validity

B) Generalizability

C) Reliability

D) Replicability

Answer: C

Difficulty Level: Easy

Skill: Remember the Facts

APA LO 1.3

TEXT LO: 2.2a Explain the importance of openness and transparency in psychological research.

Topic: Scientific Methodology: A Toolbox of Skills

22. Hilary and Phillipe are working on a research project together. They intend to conduct a naturalistic observation study to observe if children show kindness to other children when a child has had an accident. They have a child pretend to fall and scrape their knee while surrounded by other children at their school. They observe the behavior of the other children to determine if acts of kindness occur. Hilary and Phillipe watch many groups together to see if they score kindness the same. After discovering that 95 percent of the time they did score kindness the same, they begin doing observations independently. Hilary and Phillipe have a high degree of _____ in their study.

A) interrater reliability

Correct. Interrater reliability is the extent to which different people who conduct behavioral observations agree on the characteristics they are measuring.

B) experimental validity

C) global generalizability

D) replicability

Incorrect. To demonstrate replicability, they would need to do the study multiple times and show that the study found the same results.

Answer: A

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO 1.3

TEXT LO: 2.2a Explain the importance of openness and transparency in psychological research.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

23. Dr. Sneed has completed a study and found that students who feel high levels of stress prior to an exam will do more poorly on the exam. She is going to do the study again to see if she gets the same results. She is trying to _____ her study.

A) validate

B) replicate

Correct. Replication is finding the same results in repeated studies.

C) reproduce

Incorrect. Reproducing data is analyzing the data again and getting the same results.

D) generalize

Answer: B

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO 1.3

TEXT LO: 2.2a Explain the importance of openness and transparency in psychological research.

Topic: Scientific Methodology: A Toolbox of Skills

24. _____ is consistency of measurement.

A) Random assignment

B) Validity

C) Reliability

D) Confounding variable

Answer: C

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2a Explain the importance of openness and transparency in psychological research.

Topic: Scientific Methodology: A Toolbox of Skills

25. Dr. Visili has designed a new intelligence test. When giving it to Rose, he becomes concerned because her scores do not seem very consistent when she takes the test again. Dr. Visili is concerned about the test's _____.

A) validity

Incorrect. Validity is the extent to which a measure assesses what it claims to measure.

B) self-report measures

C) reliability

Correct. Reliability is the extent to which test scores are consistent.

D) falsifiability

Answer: C

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2a Explain the importance of openness and transparency in psychological research

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

26. Dr. Riviera measures his students' knowledge on the topic of memory by giving them three different quizzes over the course of 3 weeks (1 per week). He is hoping to show that student scores are largely the same from week to week. He is trying to establish the _____ of his quiz.

A) objectivity

B) reliability

Correct. Reliability is the extent to which test scores are consistent.

C) subjectivity

D) validity

Incorrect. Validity is the extent to which a measure assesses what it claims to measure.

Answer: B

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2a Explain the importance of openness and transparency in psychological research.

Topic: Scientific Methodology: A Toolbox of Skills

27. When assessing patients' personalities using an "ink blot" test that she created, Dr. Hardcastle is gaining confidence in the test's reliability. Which of the following is likely to be happening?

A) Her patients are enjoying being tested every day at the same time.

B) The test is generating approximately the same results each time it is administered to the same person.

Correct. We have evidence of reliability when test scores are consistent, or similar, each time the test is administered to the same person.

C) The test is measuring what it is supposed to be measuring across different test takers.

Incorrect. This concept would refer to validity, not reliability.

D) The test is likely to be uninformative, and it has very poor interpretive value.

Answer: B

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.1

TEXT LO: 2.2a Explain the importance of openness and transparency in psychological research.

Topic: Scientific Methodology: A Toolbox of Skills

28. Brittany, a softball player who plays catcher for the local college, has thrown out base stealers at a 42-, 39-, and 41-percent rate over her three years. Her performance could be considered which of the following?

A) valid

Incorrect. Validity is the extent to which a measure assesses what it claims to measure.

B) invalid

C) reliable

Correct. Reliability refers to the extent to which performance is consistent.

D) n reliable

Answer: C

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2a Explain the importance of openness and transparency in psychological research.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

29. Jack, Martin, and Gene are all psychologists who are asked to consult on a difficult case. They are all given the results of a particular client's Rorschach Test and are asked to come up with independent assessments of the results. All three psychologists have approximately the same level of training, and their findings are very similar. From a research perspective, one could say that there was a high level of _____ reliability between the three reports.

A) interrater

Correct. Interrater reliability refers to the extent to which different people agree on a given finding, whether it refers to a behavioral observation or an interview outcome.

B) construct

C) external

D) predictive

Incorrect. Predictive validity refers to the extent to which a given assessment tool can accurately anticipate future behaviors or outcomes.

Answer: A

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2a Explain the importance of openness and transparency in psychological research.

Topic: Scientific Methodology: A Toolbox of Skills

30. _____ is the extent to which a measure assesses what it purports, or claims, to measure.

A) Operationalization

B) Reliability

C) Validity

D) Control group

Answer: C

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2a Explain the importance of openness and transparency in psychological research.

Topic: Scientific Methodology: A Toolbox of Skills

31. Sarula recently completed a compatibility "quiz" from one of her favorite magazines, and although she and her boyfriend have been dating for nearly two years, the "quiz" results suggested they are not compatible. Luckily, Riley, one of Sarula's friends, is a student of psychology and suggested that the "quiz" may not be valid. What is her friend suggesting?

A) The "quiz" only gives you the answers you want.

B) The "quiz" is going to give you similar results every time.

Incorrect. This would be the case of her friend suggested that the quiz was not reliable.

C) The "quiz" is not very scientific.

D) The "quiz" may not measure compatibility truthfully.

Correct. If a measure is not valid, that means that it does not measure what it claims to measure or predict what it claims to predict.

Answer: D

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2a Explain the importance of openness and transparency in psychological research.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

32. Jasmine took several different self-administered intelligence tests online yesterday and obtained scores of 124, 128, and 125. She felt great, because the score she received from the psychologist last month at school was only a 95. What characteristic might the online tests be lacking?

A) reliability

Incorrect. In fact, this test has high reliability because it's producing very consistent results.

B) validity

Correct. The tests might lack validity because they don't match a psychologist-administered test (which presumably has been validated). It does seem to be reliable, because the scores are consistent with each other.

C) both reliability and validity

D) The tests appear to have both reliability and validity.

Answer: B

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2a Explain the importance of openness and transparency in psychological research.

Topic: Scientific Methodology: A Toolbox of Skills

33. Which of the following statements is TRUE about naturalistic observation?

A) It re-creates natural conditions in the laboratory as closely as possible to make an experiment more valid.

B) It involves observing behavior in its real-world context.

C) It is basically the same process as objective introspection.

D) It involves observing behavior in the lab without taking formal notes or using technological equipment to measure the experimental findings.

Answer: B

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

34. Watching behavior in real-world settings while doing your best to avoid influencing those you are watching is known as _____.

A) case study

B) correlation design

C) naturalistic observation

D) existence proof

Answer: C

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

35. Dr. Watson wanted to know which gender was better at sharing at the sixth-grade level, so he went to the local middle school to observe groups of children during lunch periods. He did this while making sure that the children were not aware that they were being watched, but the school principal gave him permission for this activity. This is a form of _____.

A) case study

B) naturalistic observation

Correct. Naturalistic observation entails watching behavior in a real-world settings.

C) experimental design

Incorrect. Naturalistic observation takes place in the real world. Experimental designs take place in a laboratory setting.

D) confirmation bias

Answer: B

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

36. A researcher is interested in determining how frequently bullying behavior occurs in real-life settings. This researcher would best be advised to use the _____ design.

A) case study

B) correlational

C) experimental

Incorrect. Naturalistic observation takes place in the real world. Experimental designs take place in a laboratory setting.

D) naturalistic observation

Correct. Naturalistic observation occurs in the real world, rather than in a laboratory.

Answer: D

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.1

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

% correct 84 a = 11 b = 0 c = 5 d = 84 r = .32

37. A group of student researchers divide up the different times and buildings on their campus to attempt to observe when people will hold a door open for another person. These student researchers are most likely to use which research method design when conducting their study?

- A) case study design
- B) correlational design
- C) experimental design

Incorrect. Naturalistic observation takes place in the real world. Experimental designs take place in a laboratory setting.

- D) naturalistic observation design

Correct. Naturalistic observation occurs in the real world, rather than in a laboratory. This is how one can most effectively assess behaviors without influencing them.

Answer: D

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

% correct 75 a = 6 b = 19 c = 0 d = 75 r = .23

38. Jason was conducting an evaluation of elementary school teachers. He sat at a desk in their classroom with a list of things to observe in front of him, and the teachers noticed that he was assessing their every move. Jason noticed that the teachers began acting more professionally around him, were more animated in the classroom, and gave their students a lot of extra attention. Why would Jason have been better off using naturalistic observation for this assessment?

- A) So that he could have more experimental control over his independent variable.

Incorrect. Remember that naturalistic observation is not a form of experimental research, and so one of its drawbacks is a lack of control.

- B) So that he would be sure to "catch" the teachers behaving unprofessionally.

- C) So that he could have been sure to get enough data to use proper statistics.

- D) So that his observations would not have changed the teachers' behaviors.

Correct. Naturalistic observation involves watching behaviors take place without influencing them. This way the researcher can get a true and objective "picture" of how those behaviors take place.

Answer: D

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

39. Professor Williams wants to know if “real” college students exhibit the same kinds of behaviors in class that subjects who were paid to act like college students do. She decides to have someone come in once a week to her classes to record the types of nonverbal behaviors that students engage in while listening to her lectures. This would be an example of which kind of study?

A) a formal experiment

Incorrect. In this study there is no manipulation of one variable to explore its effect on a second variable. This research is naturalistic observation.

B) naturalistic observation

Correct. Naturalistic observation involves watching and recording participants' behavior, often without their knowledge.

C) case study

D) survey research

Answer: B

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

40. The extent to which it is possible to draw cause-and-effect conclusions from a given research project describes the study's _____ validity.

A) construct

B) cohesive

C) external

D) internal

Answer: D

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

41. Jun is studying personal space, or how closely people will stand when speaking to each other. Instead of using a naturalistic observation, she uses a laboratory setting where she takes control over a lot of key variables. By doing this, she will increase the _____ of the experiment.

A) internal validity

Correct. Internal validity is the extent to which we can draw cause-and-effect inferences from our research data.

B) test-retest reliability

Incorrect. Test-retest reliability refers to the consistency of findings from one administration of an assessment tool to the next.

C) external validity

D) confound reliability

Answer: A

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.1

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

42. Vincent is designing a research study as part of his master's thesis. He wants to do a laboratory study where he can control as many variables as possible, but he is concerned that his findings will not generalize very well from the laboratory setting to the real world. In technical terms, Vincent is concerned about the _____ of his study.

- A) internal validity
- B) test-retest reliability

Incorrect. Test-retest reliability refers to the consistency of findings from one administration of an assessment tool to the next.

- C) external validity

Correct. External validity refers to the extent to which we can generalize findings from a research study to real world settings.

- D) confound reliability

Answer: C

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.1

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

43. A student researcher wishes to maximize the external validity of his or her research design. What research method should you recommend to him or her?

- A) case study design
- B) correlational design
- C) experimental design

Incorrect. The primary benefit of experimental designs is that they are high in internal validity. The generalizability, or external validity, of such research is sometimes quite low.

- D) naturalistic observational design

Correct. Because naturalistic observations often generalize well to the real world, they are high in external validity.

Answer: D

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.3

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

44. Naturalist observation studies are high in _____, but they are low in _____.

- A) reproducibility; replicability
- B) reliability; generalizability
- C) generalizability; reproducibility

Incorrect. In naturalistic designs we have no control over key variables and need to wait for behavior to unfold before our eyes.

- D) external validity; internal validity

Correct. In naturalistic designs we have no control over key variables and need to wait for behavior to unfold before our eyes.

Answer: D

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.3

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

45. The extent to which the findings of a given research study can generalize to a population of people beyond that study and the laboratory is called _____.

A) external validity

Correct. External validity is an important measure of the value of research results outside of that individual study.

B) test-retest reliability

C) internal validity

Incorrect. Internal validity is a measure of the extent to which a researcher can draw cause-and-effect conclusions from his or her study results.

D) interrater reliability

Answer: A

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.1

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

46. This research design involves an extremely deep and detailed information gathering from a single individual or a small number of people, often over an extended period of time.

A) case study design

B) correlational design

C) experimental design

D) naturalistic observation design

Answer: A

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

47. Which of the following is one of the primary benefits of the case study method of conducting research?

A) They can be helpful in providing existence proofs.

Correct. Existence proofs, which are demonstrations that a particular psychological phenomenon can occur, are actually assisted by case study research.

B) They have a very high level of external validity.

Incorrect. In fact, one problem with case studies is that they often have a low level of external validity.

C) They are the only type of research that allows for cause-and-effect conclusions.

D) They are resistant to heuristic biases that can skew results.

Answer: A

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 2.1

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

48. The study of rare or unusual phenomena is most easily done through the use of the _____ design.

A) case study

Correct. Because case studies can get unusually high levels of detail information, there are very useful for studying rare or unusual phenomena.

B) correlational

C) experimental

Incorrect. In fact, rare or unusual phenomena occur so infrequently that they are not effectively studied using experimental designs.

D) observational

Answer: A

Difficulty Level: Easy

Skill: Understand the Concepts

APA LO: 1.3

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

49. Clarice has learned of a child who reports that they feel no pain. Doctors have been unable to find any reason for the child to be pain resistant. Clarice is thinking about doing an in-depth study of the child for her dissertation because this set of symptoms is so rare. Clarice is considering which research method?

A) naturalistic observation

Incorrect. While naturalistic observation might give Clarice some useful information about this child, in order to get the depth that she is looking for she would have to do a case study.

B) experiment

C) independent study

D) case study

Correct. Case studies involve in-depth analyses of one or a few participants.

Answer: D

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

50. Psychologists who want to find out about people's personalities or interests would find a(n) _____ an effective research tool.

A) naturalistic observation

B) experiment

C) case study

D) questionnaire

Answer: D

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

51. Dr. Potter, an English professor, is curious about his students' attitudes toward one of his favorite books. What research method is he most likely to use to gather this information?

A) case study

Incorrect. Because Dr. Potter wants to get information from multiple students, a case study would not be an effective way of gathering that information.

B) survey

Correct. The survey method is most appropriate when we are interested in people's attitudes or opinions.

C) experiment

D) naturalistic observation

Answer: B

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

52. The most important factor to ensure that one's results apply to other people in other settings is to use _____.

A) extremely large sample sizes

B) extremely small sample sizes

C) random assignment

Incorrect. Random assignment is when we randomly assign participants to their groups. While a valuable tool for controlling experimental factors, it would not improve external validity.

D) random selection

Correct. Random selection will assure the researcher that they have a representative sample and improve external validity.

Answer: D

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 2.1

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

53. Sue asked three of her friends after class if they thought the test they just finished taking was as easy as she thought it was. They all agreed that it was. She was surprised to find out the next day that, although she and her friends had indeed done well, a majority of the class had failed. Why shouldn't Sue have been surprised?

A) Most of the students did not study for the test.

B) She did not use random selection when asking people about the test.

Correct. Without random selection, we can't be sure whether the group we've selected is representative of the larger group.

C) Students should have been randomly assigned to take the tests on different days.

Incorrect. The concept of randomness is important to answer this question, but the correct answer is random selection, not random assignment.

D) Her friends shouldn't have expressed their views regarding the test.

Answer: B

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 2.1

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

54. The major advantage of self-report measures, like surveys, is that they _____.

A) are inexpensive and easy to administer

Correct. This is, in fact, the cheapest and easiest type of research to conduct.

B) are extremely reliable and valid

Incorrect. Validity is often a problem with self-report measures, because you can't be certain that your respondents are being totally honest.

C) help establish causality

D) are unaffected by the wording or phrasing of the questions

Answer: A

Difficulty Level: Easy

Skill: Understand the Concepts

APA LO: 1.1

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

55. One difficulty of survey research is that people may not answer questions with complete honesty, and thus may skew the results of the study. If people give different answers to a survey question that is asked on different occasions, this would be a particular problem for the critical thinking concept of _____.

A) correlation vs. causation

Incorrect. There is nothing in the question that speaks to the nature of relationships (causal or otherwise) between variables.

B) replicability

Correct. If people give different answers to survey questions asked at different times, the outcomes of the research would be inconsistent. This would present a problem for replication, as the research will not give the same picture from study to study.

C) extraordinary claims

D) falsifiability

Answer: B

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 2.1

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

56. Alex, a freshman in college, wants to know how many of her dormmates have tried marijuana, so she decides to survey everyone on her floor. Despite rumors to the contrary, the results suggest that less than ten percent of her classmates have tried the drug. What is the most likely explanation for her findings?

A) People often distort their answers or fail to tell the complete truth when surveyed.

Correct. One downside of using self-report measures and surveys is that people often distort answers, either for lack of personal insight or because they want to appear more in a more positive light.

B) Her dormmates did not understand the question.

C) Alex did not calculate the findings correctly.

Incorrect. Alex may have calculated the findings correctly, but the findings may not represent the true behaviors of those with whom she spoke.

D) Surveys are not an acceptable means to gather new information.

Answer: A

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

57. A key disadvantage to self-report measures is that _____.

A) demand characteristics can bias participants answers

B) observing behavior leads to changes in behavior

Incorrect. This problem occurs more in experimental research, not in research that uses self-report measures.

C) respondents are not always honest in their answers

Correct. This can be a serious problem with self-report measures.

D) they are less effective than experiments in accurately predicting people's behavior

Answer: C

Difficulty Level:: Moderate

Skill: Understand the Concepts

APA LO: 1.1

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

58. While taking a survey on her opinions on abortion rights, Carolyn feels very conflicted. On the one hand, she believes in a woman's right to choose to terminate a pregnancy if she wants to, but at the same time she feels like this is not a particularly popular answer. Most of her friends are very opposed to the idea of having an abortion. To make herself feel like a better person, Carolyn distorts her answers to the survey questions. Instead of being totally honest, she answers in ways that make her feel like a better person. This tendency is called a _____.

A) demand characteristic

Incorrect. A demand characteristic is a cue that participants in a research study may pick up that allows them to figure out the true nature of the researcher's hypotheses.

B) confirmation heuristic

C) response set

Correct. A response set refers to the tendency of research participants to distort their responses to questionnaire items.

D) confounding bias

Answer: C

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

59. A group of students watch a videotape of two managers interacting with their subordinates at a customer service desk in a department store. Students see one of the managers act in a friendly and respectful manner toward all of the employees. The other manager is less friendly but still respectful toward the employees. What concept would explain the more positive ratings on other dimensions for the friendly manager as compared to the less friendly manager?

A) the central tendency error

Incorrect. Central tendency refers to a type of statistics, and does not apply to this example.

B) the halo effect

Correct. The halo effect refers to the tendency of ratings of one positive characteristic to influence the ratings of other positive characteristics.

C) the horns effect

D) the leniency effect

Answer: B

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

60. Professor Chapman is very friendly with her students, allowing them extra time on assignments and giving them the freedom to come late to class whenever they want. Dr. Weldon, on the other hand, is much stricter in the classroom. She does not accept late assignments, tells students "be on time or don't come to class," and at least two students got no credit on the term paper because they turned it in a day late. Both professors teach with the same quality but are different in their interactions with students. When evaluation time comes, students tend to give Dr. Weldon far lower marks because they dislike her, not because she is a bad teacher. This is an example of the _____ effect.

A) horns

Correct. The horns, or pitchfork, effect occurs involves bad qualities in one area (personality) influencing the rating of bad qualities in another (teaching skill).

B) halo

Incorrect. The halo effect is the tendency of ratings of one positive characteristic to influence the ratings of other positive characteristics.

C) leniency

D) response set

Answer: A

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

61. Darius is interested in seeing if missing class is related to overall grades. He anonymously gathers data on the students' grades and the number of days they have missed class. He would be wise to conduct a(n) _____ study with this data to answer his question.

A) case study

B) correlational

Correct. Correlational research is used to examine relationships between variables.

C) experimental

Incorrect. Experimental research can investigate the relationship between variables, but if one is not looking to establish a cause and effect relationship, a correlational design is usually easier to employ.

D) naturalistic observation

Answer: B

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

62. Two variables are said to be correlated when scores on one variable _____.

A) are unrelated to the scores on the second variable

B) are related to the scores on the second variable

C) cause the scores on the second variable

D) are different from the scores on the second variable

Answer: B

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

63. Authorities have noted that there is an increased number of teen pregnancies among high schools that offer day care to their students. We can draw which of the following conclusions?

- A) The presence of day care is causing students to become sexually active.
- B) High schools that provide day care are also offering sexual education.
- C) There is a negative correlation between teen pregnancies and day care in the high schools. *Incorrect. Two variables are negatively correlated if, as one increases, the other decreases.*
- D) There is a positive correlation between teen pregnancies and day care in the high schools. *Correct. Two variables are positively correlated if, as one increases, the other increases.*

Answer: D

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

64. Which of the following represents the strongest correlation?

- A) 0
- B) $-.87$
- C) $+.23$
- D) $+.76$

Correct. The strength of a correlation is based on the absolute value of the number. Therefore, .87 is the strongest correlation represented here.

Incorrect. The strength of a correlation is based on its absolute value, therefore, .76 is not correct.

Answer: B

Difficulty Level: Difficult

Skill: Analyze It

APA LO: 1.1

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

65. If there is no discernible relationship between scores on students' homework assignments and their exam scores in an introductory biology class, we would say that a(n) _____ correlation exists.

- A) inverse
- B) negative
- C) positive
- D) zero

Incorrect. A negative correlation would indicate that there is a relationship between the two variables in question.

Correct. When there is no relationship between two variables, the correlation is zero.

Answer: D

Difficulty Level: Difficult

Skill: Understand the Concepts

APA LO: 1.1

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

% correct 70 a = 5 b = 11 c = 14 d = 70 r = .46

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

66. As the average daily temperature in Des Moines, Iowa, *decreases*, the number of persons who are observed wearing sweaters in the workplace *increases*. This is an example of a _____ correlation.

A) causal

B) negative

Correct. A negative correlation occurs when one variable moves in one direction as the other variable moves in the opposite direction.

C) positive

Incorrect. A positive correlation occurs when both variables move in the same direction.

D) zero

Answer: B

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

67. Hopefully, the amount of time a student spends studying would show a(n) _____ correlation with the student's grades.

A) negative

Incorrect. A negative correlation occurs when the variables move in the opposite direction. In this example this is not the outcome that we would hope to see.

B) spurious

C) positive

Correct. A positive correlation means that as the value of one variable goes up, so does the other; in this instance, one would hope that the more one studies, the higher the grade.

D) illusory

Answer: C

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

68. There is a negative correlation between wearing one's seat belt and the severity of injuries received during an accident. Which statement correctly illustrates this correlation?

A) The more often you wear your seat belt, the more serious the injury you are likely to receive in an accident.

B) The more often you wear your seat belt, the less likely you are to suffer serious injuries in an accident.

Correct. A negative correlation means that as one variable goes up, the other goes down. And remember, correlation is not causation.

C) Wearing your seatbelt prevents you from being injured in an accident.

Incorrect. At first glance this might look like a correct conclusion, and tell you recognize that this conclusion involves a cause and effect statement. Correlation does not imply causation.

D) Failing to wear your seat belt increases the likelihood that you will sustain serious injuries in an accident.

Answer: B

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

69. Mr. Jones, a sixth-grade science teacher, has tried to predict his students' end-of-the-year grades by looking at their end-of-the-year grades from the previous year. Unfortunately, there does not seem to be any systematic relationship between these two variables. The correlation between these two variables is probably _____.

A) near zero

Correct. When there is no relationship between two variables, the correlation coefficient will be at or near zero.

B) positive

C) negative

Incorrect. A negative correlation would indicate that there is a relationship between the two variables in question.

D) near 1.0

Answer: A

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

70. A correlation coefficient will always range between _____.

A) 0 and 1

B) -10 and +10.

C) 0 percent and 100 percent.

D) -1.0 and +1.0.

Answer: D

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

71. Which of the following is a number that does not represent a correlation?

- A) +.23
- B) −.87
- C) −1.23

Correct. Correlations range from −1.0 to +1.0.

D) 0.0

Incorrect. Correlations can range from −1.0 to +1.0.

Answer: C

Difficulty Level: Moderate

Skill: Analyze It

APA LO: 1.1

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

72. Which correlation coefficient is most likely to describe the relationship between brushing one's teeth and the number of cavities one gets?

A) −.72

Correct. One would expect that as brushing increases, cavities tend to decrease. Thus, a negative correlation would best describe the relationship. Further, one would expect the relationship to be fairly strong and thus closer to 1.0 than to 0 in absolute value.

B) .93

Incorrect. This correlation coefficient would suggest that as brushing increases, the number of cavities increases. We would hope that the relationship between tooth brushing and the number of cavities one gets would be a strong negative correlation.

C) .08

D) .45

Answer: A

Difficulty Level: Difficult

Skill: Analyze It

APA LO: 1.3

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

73. Which of the following correlations represents the *weakest* degree of relation between two variables?

- A) daily calcium intake and bone mass density, +.11
- B) degree of exposure to lead and IQ scores in children, −.12
- C) hours of exposure to media violence and aggressive behavior, +.31
- D) number of cigarettes smoked per day and incidence of lung cancer, +.39

Answer: A

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.1

TEXT LO: 2.2b Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

% correct 14 a = 14 b = 80 c = 3 d = 3 r = .45

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

74. Kanisha is studying the relationship between the number of times an individual works out each week and their percentage of body fat. Which of the following would represent the strongest correlation between these variables?

- A) $+ .19$
- B) $- .25$
- C) $+ .43$

Incorrect. The absolute value of a coefficient represents the strength of the correlation. Therefore, this is a weaker correlation than $- .47$.

- D) $- .47$

Correct. The absolute value of a coefficient represents the strength of the correlation. Therefore, this is the largest number representing the strongest correlation.

Answer: D

Difficulty Level: Difficult

Skill: Analyze It

APA LO: 1.1

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

75. The grouping of points on a two-dimensional graph in which each dot represents a single person's data is called a _____.

- A) bar graph
- B) frequency polygon
- C) histogram
- D) scatterplot

Answer: D

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

76. Dr. Schott's scatterplot reveals no real patterns or clusters. In fact, the data seems to fall randomly on the graph. This pattern of results is most likely from which type of correlation?

- A) positive
- B) zero

Correct. When the correlation coefficient is near zero, the points on a scatterplot will be all over the graph, with no discernable pattern.

- C) negative

Incorrect. On a scatterplot, a negative correlation will appear as data points clustered around a line going from upper left to lower right.

- D) illusory

Answer: B

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 1.1

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

77. Dr. Stanhope is trying to determine which type of correlation is represented on his scatterplot, in which nearly all of his data are clustered along a diagonal line running from higher numbers on the left down to lower numbers on the right. Which type of correlation is represented by this pattern?

A) positive

B) zero

Incorrect. When the correlation coefficient is near zero, the points on a scatterplot will be all over the graph, with no discernable pattern.

C) negative

Correct. On a scatterplot, a negative correlation will appear as data points clustered around a line going from upper left to lower right.

D) We need more information to draw a conclusion.

Answer: C

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 1.1

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

78. For many years, newspapers often mentioned the race of criminal suspects who were NOT white in the article detailing their crimes. This often led people who were not obviously biased or prejudiced to conclude that more non-whites committed crimes than whites. This is one example of _____.

A) the confirmation bias

Incorrect. The confirmation bias occurs when people attend to information that supports their beliefs, but disregard information that contradicts their beliefs.

B) the hindsight bias

C) an illusory correlation

Correct. An illusory correlation exists when there is the appearance of a relationship between two variables that does not truly exist.

D) the representativeness heuristic

Answer: C

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

79. The perception of a statistical association between two variables where none exists is known as _____.

A) confirmation bias

B) illusory correlation

C) existence proof

D) Type I error

Answer: B

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

80. Because he often sees television reports about politicians who have behaved dishonestly and have been prosecuted for ethics violations, Warren tends to believe that *all* politicians are dishonest and untrustworthy. This is an example of a(n) _____.

A) confirmation bias

Incorrect. Confirmation bias occurs when people attend to information that supports their beliefs but disregard information that contradicts their beliefs.

B) illusory correlation

Correct. An illusory correlation exists when there is the appearance of a relationship between two variables that does not truly exist.

C) existence proof

D) Type I error

Answer: B

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

81. While playing poker with his friends, Matthew scratches his right leg before winning a very big hand. He decides that scratching his right leg will be his "lucky gesture," and for a long time scratches his right leg with every hand that is dealt. This silly superstition violates which rules of critical thinking?

A) correlation vs. causation

Correct. A demonstration of an illusory correlation, which underlies many superstitions, Matthew has failed to recognize that the relationship between a leg scratch and a winning hand is not causal.

B) falsifiability

C) extraordinary claims

D) Occam's Razor

Incorrect. Nothing in this particular question speaks to the rule of parsimony, or Occam's Razor.

Answer: A

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 2.1

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

82. When asked if there are more ice cream cones sold in November or July, Mary answers July immediately. She is surprised to find out that there is little to no difference between the two months in terms of ice cream cone sales. Mary's error is most clearly an example of _____.

A) imaginary correlation

Incorrect. The correct term for this incorrect belief in the existence of relationship is the illusory correlation.

B) common sense

C) superstitions

D) illusory correlation

Correct. Illusory correlation occurs when we perceive a relationship between two variables where none actually exists.

Answer: D

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

83. Six-year-old Scotty comes running in the door and yells triumphantly to his mother, "Today is my lucky day; I found a four-leaf clover and won the sack race at school! Forever, March 23 will be known as my lucky day and great things will happen." Many superstitions, like this one, likely began as which of the following?

A) imaginary correlations

B) anecdotal stories

C) coincidences

Incorrect. Coincidental events are often at the heart of the belief in an illusory correlation.

D) illusory correlations

Correct. Illusory correlation refers to our tendency to perceive a relationship between two events that are not actually related.

Answer: D

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

84. _____ studies allow us to make predictions about one variable based on the knowledge of another but do not allow us to draw conclusions about cause-and-effect relationships.

A) Case

B) Experimental

C) Natural

D) Correlational

Answer: D

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2b Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

85. Correlational research designs cannot help you draw _____.

- A) causal conclusions
- B) descriptive inferences
- C) predictive inferences
- D) conclusions about relationships

Answer: A

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

86. As your text discusses, a statistician once discovered that in one of the United States there was a negative correlation between the number of PhDs granted and the number of mules in that state. The fact that you cannot then state that the number of PhDs conferred causes the mule population to decrease demonstrates which principle of critical thinking?

- A) correlation vs. causation

Correct. Bear in mind that correlational data only gives information about the strength and direction of a relationship between two variables. It says nothing of the causal direction.

- B) extraordinary claims

Incorrect. It is indeed extraordinary to believe that the number of mules in a state would be related to the number of PhDs that are conferred, but this question demonstrates the problem of correlation vs. causation.

- C) ruling out rival hypotheses

- D) falsifiability

Answer: A

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 2.1

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

% correct 74 a = 74 b = 21 c = 0 d = 5 r = .24

87. The only research design that allows one to make cause-and-effect inferences is the _____ design.

- A) case study
- B) correlational
- C) experimental
- D) naturalistic observation

Answer: C

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

% correct 49 a = 19 b = 24 c = 49 d = 8 r = .39

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

88. What is the main difference between an experiment and a correlational study?

A) A correlational study involves the manipulation of variables, while an experiment does not.

Incorrect. This is the opposite of the correct answer.

B) An experiment looks at the relationship between independent and dependent variables, while a correlational study looks at the relationship between within-group and between-group variables.

C) A correlational study looks at the relationship between independent and dependent variables, while an experiment looks at the relationship between within-group and between-group variables.

D) An experiment involves the manipulation of variables, while a correlational study does not.

Correct. It is the manipulation of variables along with random assignment that allows an experiment to make cause and effect conclusions, while a correlational study cannot.

Answer: D

Difficulty Level: Difficult

Skill: Analyze It

APA LO: 1.1

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation; 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

% correct 44 a = 0 b = 31 c = 25 d = 44 r = .35

% correct 42 a = 5 b = 53 c = 0 d = 42 r = .46

89. A research design characterized by random assignment of participants to conditions and manipulation of an independent variable is called a(n) _____.

A) case study

B) naturalistic observation

C) experiment

D) survey

Answer: C

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

90. Dr. Hornsby conducts a study where people are randomly selected from a population and then randomly assigned to a control group and an experimental group. She then manipulates an independent variable and measures a dependent variable to analyze and draw her conclusions. She is conducting a(n) _____.

A) survey

B) experiment

Correct. An experiment involves the manipulation of variables.

C) correlation

Incorrect. A correlation does not involve the manipulation of variables.

D) naturalistic observation

Answer: B

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

91. A key aspect of an experiment that is missing in other research designs is a(n) _____.

A) description of the phenomena of interest

Incorrect. Actually case studies, surveys, and correlations allow us to describe phenomena.

B) explanation of why a relationship exists

C) prediction of the effects of differences in one variable on another

D) random assignment of participants to different groups

Correct. Experiments are strong experimental techniques because of random assignment.

Answer: D

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

92. Professor Golder is studying hyperactivity in preschool age children. She is concerned that differences in child rearing, diet, and so forth may affect her results. To minimize these potential preexisting variables, she should be sure to do which of the following?

A) Use random assignment when forming her groups.

Correct. Random assignment "cancels out" the effects of any preexisting differences between groups, allowing study of the variable of interest.

B) Include an independent variable.

C) Include a dependent variable.

D) Assign boys to the experimental group and girls to the control group.

Incorrect. This kind of assignment to participant groups would actually be problematic, because it would create a confounding variable that could make the experiment invalid.

Answer: A

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

93. In an experiment, the _____ group receives no manipulation of an independent variable.

A) control

B) dependent

C) independent

D) experimental

Answer: A

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

94. A researcher wants to see whether she can make the typical administrative assistant job more motivating at Acme, Inc. To experimentally investigate this possibility, she randomly assigns administrative assistants to one of the following conditions: doing the job as it has always been done, having a computer performance monitoring device installed, receiving feedback about their performance on a weekly basis, or being given a say in how one's workload is structured and done. Which of the preceding conditions is an example of a *control group*?

A) being given a say in how one's workload is structured and done

B) doing the job as it has always been done

Correct. The group that receives no independent variable is the control group. In this case, doing the job as it always has been done would serve as the control.

C) having a computer performance monitoring device installed

Incorrect. This group of participants would represent one of the experimental groups.

D) receiving feedback on a weekly basis

Answer: B

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

% correct 65 a = 19 b = 65 c = 13 d = 3 r = .37

% correct 79 a = 16 b = 79 c = 5 d = 0 r = .45

95. Ryan, a professional bass fisherman, is trying to determine which lure is most effective on Wakeby Lake: the plastic worm he normally uses or the new minnow-style lure he bought yesterday. Based on this scenario, what would constitute the control?

A) the new minnow lure

Incorrect. Using the new minnow lure would represent the experimental case.

B) the plastic worm

Correct. A control receives no manipulation in an experiment. In this case, normal use of the plastic worm suggests lack of manipulation.

C) neither the minnow lure nor the plastic worm

D) There is no control in this particular experiment

Answer: B

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

96. Dr. Johansen randomly assigned research participants to three different groups during her last experiment. She then proceeded to give all the participants in the experiment a new study technique designed to enhance their learning for the upcoming test. What critical error did she make during her experiment?

- A) She failed to identify the independent variable.
- B) She failed to identify the dependent variable.
- C) She failed to include an experimental group.

Incorrect. Because all of her participants received the independent variable in question, they were all part of an experimental group. The problem with this research is that there is no control group.

- D) She failed to include a control group.

Correct. In an experiment, we need to ensure that there is a group that receives the "active" treatment and a group that receives a "placebo" treatment (in this case, a study technique that has already been tested).

Answer: D

Difficulty Level: Difficult

Skill: Analyze It

APA LO: 1.3

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

97. Several years ago, the NBA (National Basketball Association) introduced a new style of basketball to the players. After several months, many players complained that they did not like the "feel" of the new ball. Based on this scenario, what constitutes the control?

- A) There is no control condition.

Incorrect. The control condition was the use of the original ball that the players have become accustomed to.

- B) the new ball that was introduced

- C) the original ball that players were used to

Correct. A control receives no manipulation in an experiment. In this case, the original ball suggests lack of manipulation.

- D) Both the new and old balls are part of the control condition.

Answer: C

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

98. The group of participants that receives a manipulation of the independent variable in an experimental study is called the _____ group.

- A) control
- B) dependent
- C) experimental
- D) independent

Answer: C

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

99. The _____ variable is what the researcher “manipulates,” or varies, in an experimental study.

- A) control
- B) dependent
- C) operational
- D) independent

Answer: D

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

100. The variable that an experimenter measures to determine whether or not the manipulation has had an effect is the _____ variable.

- A) causal
- B) confounding
- C) dependent
- D) independent

Answer: C

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

101. An administrator believes that the placement of motivational posters on the walls in classrooms of academic buildings will lead to increased GPAs at his school. To test his theory, he randomly assigns certain classrooms within the College of Liberal Arts and Sciences to have the posters, while others do not. None of the remaining four academic colleges have any posters placed in their classrooms. What is the *independent* variable in this study?

A) academic college

B) classroom wall hangings

Correct. The presence or absence of classroom wall hangings is the manipulated variable, so that is the independent variable.

C) gender of the student

D) grade point average

Incorrect. The grade point average of the students is what is being measured, so that is the dependent variable.

Answer: B

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

% correct 74 a = 0 b = 74 c = 10 d = 16 r = .47

102. A medical doctor believes that the presence of aromatherapy will reduce patients' anxiety before and after surgery and increase their reported satisfaction with their care at his hospital. He randomly assigns patients to surgical suites and recovery rooms either with or without aromatherapy. What is the *independent* variable in this example?

A) anxiety level before and after surgery

B) number of previous surgeries

C) presence or absence of aromatherapy

Correct. The room environment is what is being manipulated in the experiment, so that is the independent variable.

D) satisfaction with hospital care

Incorrect. The satisfaction with hospital care is what is being measured, so that is the dependent variable.

Answer: C

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

103. Professor Todd decides to test her hypothesis that sucking on lemon drops during exams increases students' test scores. She randomly assigns students to two groups at the beginning of the semester. One group receives lemon drops during each test, while the other group receives another type of candy. She compares their scores at the end of the year and finds that the students who had the lemon drops scored an average of ten points higher on their exams. What is the dependent variable in this experiment?

A) students' test scores

Correct. These students' test scores are what is being measured, so that is the dependent variable.

B) lemon drops

Incorrect. The presence or absence of lemon drops is what is being manipulated in the experiment, so that is the independent variable.

C) the students themselves

D) the professor

Answer: A

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

% correct 50 a = 50 b = 42 c = 5 d = 3 r = .62

% correct 79 a = 79 b = 16 c = 0 d = 5 r = .47

104. Coach Ezell wants her players to relax before playing important conference games. At the halfway point in the season, instead of the dance music she normally had playing in the locker room, she switches to classical music before the games. She observes the players to measure relaxation prior to the game starting. What is the dependent variable in this scenario?

A) the new classical music

Incorrect. The type of music that is being played is what is being manipulated in the experiment, so that is the independent variable.

B) the players' stress level

Correct. The players' stress level is what is being measured, so that is the dependent variable.

C) the coach

D) the original dance music

Answer: B

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

105. Professor Saltzman decides to test her hypothesis that students who do breathing exercises prior to an exam will score higher on their exams. She meets her class and through random assignment has half of the students do breathing exercises while the other half talk to each other before the exam. She finds that students who did the breathing exercises score 10 percent higher on exams than those who don't do the breathing exercises. What conclusions can be drawn from this research?

A) Breathing exercises cause students to improve their performance on exams.

Correct. An experiment with random assignment to groups allows us to determine cause and effect.

B) Breathing exercises have no impact on students' test scores.

C) Breathing exercises may increase students' satisfaction with the class.

D) Breathing exercises make students happy.

Incorrect. These students may feel happy as a result of doing better on their exams, but that is not a relationship measured in this experiment. This experiment also does not look at the relationship between breathing exercises and student happiness.

Answer: A

Difficulty Level: Difficult

Skill: Analyze It

APA LO: 1.3

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

106. When conducting an experiment, it is of crucial importance that the operational definitions of what is being measured are clearly stated and easily identified. This allows for other researchers to try to repeat the research to verify the findings. To which principle of critical thinking is this factor most relevant?

A) Occam's Razor

B) replicability

Correct. If research is to be repeated (or replicated), then the operational definitions from one study to the next must be consistent and clear.

C) extraordinary claims

Incorrect. There is nothing in this question that speaks to the need for extraordinary claims to be supported by similarly impactful evidence.

D) correlation vs. causation

Answer: B

Difficulty Level: Difficult

Skill: Analyze It

APA LO: 2.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

107. A(n) _____ definition in an experiment refers to a working description of what the researcher is measuring or observing in the study.

- A) control
- B) dependent
- C) operational
- D) independent

Answer: C

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

108. Dr. Petrie conducts a study looking at the impact of a new induction program on student satisfaction on campus. He randomly assigns students to receive the old induction program or the new induction program. At the end of the year, he measures satisfaction by the Krugers College Satisfaction Scale. He discovers that students who went through the old induction program are actually more satisfied. In this experiment, what is the operational definition of the dependent variable?

- A) the description of the new induction program
- B) the description of the old induction program
- C) the scores from the Krugers College Satisfaction Scale

Correct. These scores are the description for measuring satisfaction.

D) satisfaction as measured by the number of students still at the college after the first year
Incorrect. While this might be a behavioral measure to consider as part of satisfaction, it was not part of this study.

Answer: C

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

109. In an experiment, a researcher wants to avoid the presence of _____.

- A) confounding variables
- B) dependent variables
- C) independent variables
- D) a random assignment

Answer: A

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

110. When acting as a participant in a research study examining the relationship between alcohol consumption and driving ability, Layla was assigned to the experimental group that received the highest amount of alcohol to drink. Despite this ingestion of liquor, Layla was still able to navigate the driver's course perfectly. The experimenter did not consider the fact that Layla had been a drinker for many years, and had developed a high alcohol tolerance. This factor, which impacted the dependent variable in the study, would be called a(n) _____ variable.

- A) external
- B) dependent
- C) independent
- D) confounding

Answer: D

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

111. Other than the independent variable, the _____ variable may also differ between experimental and control groups.

- A) confounding
- B) dependent
- C) false
- D) placebo

Answer: A

Difficulty Level: Moderate

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

112. Why is it important to make sure that different participant groups are roughly equivalent in terms of personal characteristics (e.g., age, gender) before any independent variable is introduced?

- A) because it is important to treat all research participants equally so that they feel that they are not being manipulated

Incorrect. This is a correct statement, but it does not answer the question of why we want participant groups to be equivalent before an independent variable is introduced.

- B) because research ethics forbid any experiment to take place when the participant groups are fundamentally different from each other

- C) so that no major differences between the groups bias the results of the experiment

Correct. When the groups are different before the research begins, any changes in the dependent variable might be caused by those differences (which are called confounding variables).

- D) because it threatens the integrity of a within-group experimental design

Answer: C

Difficulty Level: Difficult

Skill: Analyze It

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

113. One difficulty in conducting medical research is that participants often assume that any treatment will be effective in alleviating their symptoms. Therefore, a researcher has to design an experiment that measures the influence of _____.

- A) random selection
- B) medical confounds
- C) the Rosenthal effect

Incorrect. The Rosenthal effect refers to experimenter expectancy effects. That is not seen in this example.

- D) the placebo effect

Correct. The placebo effect occurs when a participant's expectations cause him or her to experience certain effects.

Answer: D

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

114. People report feeling better after taking medication even though it hasn't had time to be effective. They are experiencing _____.

- A) the experimenter bias effect
- B) low reliability
- C) the placebo effect
- D) confirmation bias

Answer: C

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

115. Dr. Wilkins randomly assigns subjects to one of three groups. He is interested in the effects of caffeine on anxiety levels. He gives subjects in the first group an extra two cups of coffee a day for six months. The second group receives an extra two cups of decaffeinated coffee a day for the same time period, while the control group is not given either regular or decaffeinated coffee. By providing one group with decaffeinated coffee, Dr. Wilkins is trying to account for which potential element of the experiment?

- A) a control condition
- B) the Rosenthal effect

Incorrect. The Rosenthal effect refers to experimenter expectancy effects. That is not seen in this example.

- C) the placebo effect

Correct. The placebo effect occurs when an inert treatment "works." In this case, it would occur if the decaf coffee increased anxiety (it should have no effect on anxiety).

- D) the artificial condition

Answer: C

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

% correct 88 a = 8 b = 1 c = 88 d = 1 r = .37

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Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

116. Lisa, a college student, had a great time at the party last night. She danced, sang karaoke, and even played the “rock band” video game—all behaviors that she had never exhibited in public before. She had been drinking the “punch” all night long, which she was told contained high levels of alcohol. Lisa was quite surprised to find out the next morning that the punch did NOT contain any alcohol. What concept may explain Lisa’s behavior?

A) the Rosenthal effect

B) illusory correlations

C) the nocebo effect

Incorrect. The nocebo effect is harm resulting from the mere expectation of harm.

D) the placebo effect

Correct. The placebo effect occurs when an inert treatment “works.” In this case, it would occur if the nonalcoholic punch produced more gregarious behavior.

Answer: D

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

117. The best way to avoid the placebo effect in research is to _____.

A) keep the participants “blind” as to which participant group they are in

B) use adequate debriefing before the research is conducted

C) wait until after the research is complete before garnering informed consent

D) using better methods of deception (consistent with research ethics) in the experiment

Answer: A

Difficulty Level: Difficult

Skill: Analyze It

APA LO: 2.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

118. When someone experiences harm based solely on the expectation that they will experience harm, this is called the _____ effect.

A) Zaigarnik

B) nocebo

C) Barnum

D) placebo

Answer: B

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.4b

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

119. Matthew believes that the bath water his daddy has run for him is too hot and is going to burn him. Even though the water is only slightly above warm, the minute Matthew sticks his foot in the water, he pulls it out, cries, and says that the water burned him. Matthew's perception of being in pain is due to the _____ effect.

A) Zaigarnik

B) nocebo

Correct. The nocebo effect is harm resulting from the mere expectation of harm.

C) Barnum

D) placebo

Incorrect. The placebo effect occurs when an inert treatment "works."

Answer: B

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

120. The _____ is a phenomenon in which researchers' hypotheses lead them to unintentionally bias the outcome of a study.

A) durability bias

B) experimenter expectancy effect

C) availability heuristic

D) confounding error

Answer: B

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

121. The experimenter expectancy effect is also called the _____ effect.

A) Rosenthal

Correct. These terms both refer to a type of bias that occurs when a researcher anticipates certain outcomes and then lets those expectations impact his or her results.

B) McGuirk

C) Flynn

Incorrect. The Flynn effect refers to an increase in the IQ scores of a population over generations.

D) Werth

Answer: A

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

122. Dr. Francis is conducting a study in which she is examining the impact of a new drug on depression in adults. She has hypothesized that the new drug will significantly decrease sadness in adults diagnosed with depression. She has to remember not to let her expectation of an outcome influence her interpretation of the final data. In other words, she needs to defend against the _____ effect.

A) Flynn

Incorrect. The Flynn effect, which is not discussed in this chapter, refers to a tendency for a population's IQ scores to gradually increase over time.

B) nocebo

C) Rosenthal

Correct. The Rosenthal effect, which is another name for experimenter expectancy effect, occurs when a researcher's hypotheses lead them to unintentionally bias the study's outcomes.

D) Rogers

Answer: C

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

123. An experiment would be described as _____ when neither researchers nor participants are aware of who is in the experimental or control group.

A) blind

B) unfalsifiable

C) a placebo

D) double-blind

Answer: D

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

124. How does conducting a double-blind study attempt to remedy the experimenter expectancy effect?

A) The experimenter does not know, but the participant does know, what condition the participant is assigned to.

Incorrect. This would be an example of a single blind study. In a double-blind study, neither the experimenter nor the participant knows which condition the participant has been assigned to.

B) The experimenter and the participant both know what condition the participant is assigned to.

C) The experimenter knows, but the participant does not know, what condition the participant is assigned to.

D) Neither the experimenter nor the participant knows what condition the participant is assigned to.

Correct. When neither the experimenter nor the participant knows what condition has been assigned, it eliminates the possibility of the placebo and experimenter effects.

Answer: D

Difficulty Level: Difficult

Skill: Understand the Concepts

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

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Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

125. In the case of Clever Hans, a teacher named Wilhelm von Oster claimed that he had taught his horse arithmetic, including square roots. As it turns out, the horse was merely responding to subtle, unintentional physical signals being given by von Oster. This demonstrates which principle of critical thinking?

A) extraordinary claims

Correct. It is certainly extraordinary to think that a horse can be taught to do higher math problems, but in this case, the evidence of the validity of the claims was not so extraordinary.

B) correlation vs. causation

C) replicability

D) Occam's Razor

Incorrect. The simplest explanation for the case of Clever Hans is that he was being unintentionally fed the correct answers, but the best answer to this case is extraordinary claims.

Answer: A

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 2.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

126. Dr. Leopold is conducting a study on the effects of early maternal separation on depression in monkeys. He is currently doing observations on Clem, a monkey that he knows experienced an early separation from his mother. Clem is sitting in the corner, hunched over, barely moving. Dr. Leopold scores this behavior as a depressive posture. Later he discovers that Clem was playing with an insect crawling on the floor, not just sitting there. Dr. Leopold might have let his expectations cloud his behavioral observations. This allowed a(n) _____ to impact his data.

A) demand characteristic

Incorrect. Demand characteristics are when a participant changes their behavior to fulfill what they believe would be expectations of the experimenter in the experiment.

B) halo effect

C) experimenter expectancy effect

Correct. Dr. Leopold is allowing his knowledge of Clem's early separation to influence his interpretation of Clem's behavior.

D) extraordinary claim

Answer: C

Difficulty Level: Difficult

Skill: Analyze It

APA LO: 1.3

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

127. Marissa just finished completing her new employee questionnaire form for a job in sales. Despite being a rather shy, introverted person, Marissa checked all the areas that referred to her as a talkative and outgoing individual. She believes those extraverted characteristics are exactly what her new employer is looking for. Which concept is being illustrated?

- A) participant bias
- B) the primacy effect
- C) demand characteristics

Correct. Demand characteristics are cues that participants pick up that allow them to guess about the researcher's hypothesis. In this case, Marissa could guess that the employer was looking for extraverted candidates.

- D) the Rosenthal effect

Incorrect. The Rosenthal effect refers to experimenter expectancy effects. That is not seen in this example.

Answer: C

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

128. Eila is participating in a psychological experiment for one of the graduate students at her university. She is pretty confident that she knows the true intent of the study and is trying to answer the questions accordingly. Eila is engaging in _____, a common pitfall in experiments.

- A) intentionality
- B) the Rosenthal effect

Incorrect. The Rosenthal effect refers to experimenter expectancy effects. That is not seen in this example.

- C) observer bias
- D) demand characteristics

Correct. Demand characteristics are cues that participants pick up that allow them to guess about the researcher's hypothesis.

Answer: D

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

129. In one of the most shameful violations of research ethics to date, nearly 400 Black men from _____ were not informed that they had been diagnosed with syphilis and were not provided with available, effective treatments for this illness.

- A) Tuskegee
- B) Baton Rouge
- C) Biloxi
- D) Montgomery

Answer: A

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 3.1

TEXT LO: 2.3a Explain the ethical obligations of researchers toward their research participants.

Topic: Ethical Issues in Research Design

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

130. Which ethical requirement of research was not present in the Tuskegee experiment, in which nearly 400 Black men were not told they had syphilis and were denied treatment for its symptoms?

- A) deception
- B) confidentiality

Incorrect. Confidentiality would be protecting that their name is not shared with any aspect of the study.

- C) informed consent

Correct. Informed consent is telling participants what the study involves before asking them to participate.

- D) debriefing

Answer: C

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 3.1

TEXT LO: 2.3a Explain the ethical obligations of researchers toward their research participants.

Topic: Ethical Issues in Research Design

131. What is the primary purpose of an institutional review board?

- A) to help protect research participants from abuse
- B) to hinder the research process by placing unnecessary hurdles in the way of researchers
- C) to help protect the university from lawsuits from unhappy research participants
- D) to encourage the use of deception in medical and psychological research with humans

Answer: A

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 3.1

TEXT LO: 2.3a Explain the ethical obligations of researchers toward their research participants.

Topic: Ethical Issues in Research Design

132. Students of psychology are often frustrated because there are very few, if any, clear-cut answers to many of their questions. What is the primary limiting factor in obtaining first-hand knowledge of questions such as the long-term effects of child abuse or the effects of smoking marijuana on a pregnancy?

- A) Most people in the general public are not concerned with these issues.
- B) It is difficult to find people who are victims of abuse or mothers who smoke marijuana during pregnancy.

- C) Ethical guidelines in research prevent psychologists from carrying out many of these studies.

Correct. Due to ethical considerations, we cannot randomly assign children to abusive or nonabusive homes, for example. Thus, it is impossible to say whether A causes B, in many cases.

- D) Institutional review boards encourage participation in studies that may be harmful to participants either mentally or physically.

Incorrect. Nothing could be further from the truth. Institutional review boards exist to prevent unnecessary harm or discomfort to research participants.

Answer: C

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 3.1

TEXT LO: 2.3a Explain the ethical obligations of researchers toward their research participants.

Topic: Ethical Issues in Research Design

133. If Dr. Shioux wants to conduct research that will involve human participants at his university, he will have to submit a summary of the study to a(n) _____ before he can actually proceed. This will act as a form of protection for the participants he intends to enroll in his research.

A) subjects rights committee (SRC)

B) institutional review board (IRB)

Correct. An IRB exists to protect human participants from potentially abusive research protocols.

C) human resources investigation panel (HRIP)

Incorrect. Human resources is usually a department involved in assisting and interacting with faculty members at a company or business. It is not involved in research protocol examination.

D) ethics assurance board (EAB)

Answer: B

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 3.1

TEXT LO: 2.3a Explain the ethical obligations of researchers toward their research participants.

Topic: Ethical Issues in Research Design

134. Which of these is part of the APA ethical principles for human research?

A) Research participants must give informed consent.

B) Research participants must be deceived so that they do not know the true nature of the research to which they are contributing.

C) Research participants must be paid for their contribution.

D) As long as informed consent has been given, research participants may be subjected to any level of physical or psychological pain or discomfort.

Answer: A

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 3.1

TEXT LO: 2.3a Explain the ethical obligations of researchers toward their research participants.

Topic: Ethical Issues in Research Design

% correct 91 a = 91 b = 0 c = 0 d = 9 r = .44

135. In examining the research of Stanley Milgram, who explored factors related to obedience in research participants, which of the following areas of ethics seems to be the most salient issue in determining if his research was or was not a violation of reasonable ethical standards?

A) the right to withdraw from research

B) pain and suffering in non-human participants

C) debriefing

Incorrect. Milgram's research protocol involved a thorough debriefing to participants after the research session was completed.

D) informed consent

Correct. Some have suggested that because he did not adequately inform participants what they were "getting into," that his research failed in its obligation to obtain true informed consent.

Answer: D

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 3.1

TEXT LO: 2.3a Explain the ethical obligations of researchers toward their research participants.

Topic: Ethical Issues in Research Design

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

136. Kristoff conducts a study that hides the fact that participants are being measured on their levels of depression. They are told that the questionnaire simply measures attitudes and preferences. After the study Kristoff tells participants what the study was really measuring and helps them to learn how they can get the results of the study once all of the data have been gathered. Kristoff is performing the _____ for the study.

A) debriefing

Correct. Debriefing is a process whereby researchers let participants know what the study was about and it is generally conducted after the study has ended.

B) informed consent

Incorrect. Informed consent happens before the study. Kristoff is doing this after the study has been completed.

C) experimenter expectancy prelude

D) rules and records approval

Answer: A

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 3.1

TEXT LO: 2.3a Explain the ethical obligations of researchers toward their research participants.

Topic: Ethical Issues in Research Design

137. Dr. Williams believes that by administering brief electric shocks to his students, he can improve their attention to his lectures. He blames daydreaming and inattention by his students for their poor performance in his class. His colleagues are not convinced that the potential benefits to the students will outweigh the physical pain they may endure. Ultimately, what will Dr. Williams have to obtain from his students before proceeding?

A) medical records

B) a debriefing of the results of the study

Incorrect. Debriefings come after a participants contribution to a study has been completed. In this case, informed consent must be obtained before the participants contribute to the study.

C) information about the students' parents

D) informed consent

Correct. Informed consent is a process that helps research participants know what they are getting into, and is necessary for conducting an ethically sound study.

Answer: D

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 3.1

TEXT LO: 2.3a Explain the ethical obligations of researchers toward their research participants.

Topic: Ethical Issues in Research Design

138. Research scientist Igor wants to determine if chronically presenting negative comments to students will motivate them to improve their performance in class. Igor presents in his proposal to the IRB that he will follow every activity and homework assignment with insults and negativity to his students. He does propose getting informed consent but proposes using deception to hide the true intent of the study. What will be the greatest concern of the IRB after reading this proposal?

A) The inappropriate use of informed consent in this experiment

B) The use of deception

Incorrect. While the deception used here is questionable, it is not the greatest concern for the IRB.

C) The potential harm that would be brought to the participants

Correct. This experiment has the potential to cause great harm to the participants.

D) The fact that this study is really better suited to an animal population

Answer: C

Difficulty Level: Moderate

Skill: Analyze It

APA LO: 3.1

TEXT LO: 2.3a Explain the ethical obligations of researchers toward their research participants.

Topic: Ethical Issues in Research Design

139. Professor Wagner is explaining to his subjects the purpose behind the experiment they just participated in, along with a general description of the results. He needs to do this because the research involved some deception of the participants so that they would not be influenced by knowing the true purpose of the study. He is engaging in what aspect of a research study?

A) debriefing

Correct. Debriefing is a process that allows the researcher to fully disclose the nature of the study and provide more information. It occurs once an individual's participation is complete.

B) informed consent

Incorrect. Informed consent is a process that helps research participants know what they are getting into, and is necessary for conducting an ethically sound study. It must be garnered before a participant contributes to a study.

C) ethical considerations

D) ethical consent

Answer: A

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 3.1

TEXT LO: 2.3a Explain the ethical obligations of researchers toward their research participants.

Topic: Ethical Issues in Research Design

140. An overwhelming number of research studies that examine non-human participants involve the use of _____.

A) monkeys and chimpanzees

B) fish and insects

C) rodents and birds

D) dogs and cats

Answer: C

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 3.1

TEXT LO: 2.3b Describe both sides of the debate on the use of nonhuman animals as research subjects.

Topic: Ethical Issues in Research Design

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

141. Dr. Nolen wants to know the effects of removing portions of one's brain on long-term relief from chronic seizures, in the hopes of one day finding a cure for epilepsy. The subjects for his study are most likely to be _____.

A) humans

Incorrect. Although it would probably be most useful for the treatment of epilepsy to conduct this research on human beings, there is no ethical way this could occur.

B) nonhuman animals

Correct. Some research cannot ethically be conducted on humans, so nonhuman animals (most often mice or rats) are used instead.

C) robots

D) insects

Answer: B

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 3.1

TEXT LO: 2.3b Describe both sides of the debate on the use of nonhuman animals as research subjects.

Topic: Ethical Issues in Research Design

142. Which of the following statements summarizes where the current debate on the use of nonhuman animals in research stands?

A) It has been resolved that until something better comes along, nonhuman animal subjects will continue to be used in research.

B) It is clear that nonhuman animal subjects should no longer be used in research paradigms to answer questions about humans.

Incorrect. While it would be ideal to no longer need nonhuman animal subjects for research, the problem is very complex.

C) The intense controversy surrounding nonhuman animal research is unlikely to subside anytime soon.

Correct. There do not seem to be any easy answers regarding the use of nonhuman animal subjects.

D) There does not seem to be any reason to do a cost benefit analysis for any research proposed using nonhuman animal subjects.

Answer: C

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 3.1

TEXT LO: 2.3b Describe both sides of the debate on the use of nonhuman animals as research subjects.

Topic: Ethical Issues in Research Design

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

143. What is the authors' position on the use of nonhuman animal research in psychology?

A) Nonhuman animal research provides important insights but also comes with costs in terms of death and suffering of these subjects.

Correct. This is a correct statement of the authors' position on the use of nonhuman animal research.

B) All nonhuman animal research must be ended as soon as is possible.

Incorrect. Many people feel this way, but this is not the position taken by the authors.

C) It is more desirable to harm nonhuman animals than to harm humans in the research process.

D) Results from nonhuman animal research cannot inform us of how the same phenomenon occur with humans.

Answer: A

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 3.1

TEXT LO: 2.3b Describe both sides of the debate on the use of nonhuman animals as research subjects.

Topic: Ethical Issues in Research Design

144. The application of mathematics to describe and analyze data is known as _____.

A) dispersion

B) data reduction

C) statistics

D) psychometrics

Answer: C

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.4a Identify uses of various measures of central tendency and variability.

Topic: Statistics: The Language of Psychological Research

145. Numerical characterizations that describe data are known as _____.

A) central tendencies

B) inferential statistics

C) dispersion

D) descriptive statistics

Answer: D

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.4a Identify uses of various measures of central tendency and variability.

Topic: Statistics: The Language of Psychological Research

146. Which of the following is one of the two types of statistics that researchers use to analyze the data that they collect?

A) predictive statistics

B) applied statistics

C) descriptive statistics

D) computational statistics

Answer: C

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.4a Identify uses of various measures of central tendency and variability.

Topic: Statistics: The Language of Psychological Research

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

147. Which of the following is a measure of central tendency?

- A) mode
- B) variability
- C) range
- D) standard deviation

Answer: A

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.4a Identify uses of various measures of central tendency and variability.

Topic: Statistics: The Language of Psychological Research

148. Which of the following words is probably the best synonym for the mean of a data set?

- A) popular
- B) middle
- C) spread

Incorrect. The spread of a set of data points would be indicated by the range, not the mean.

- D) average

Correct. The mean is a measure of central tendency that refers to the average of a set of data points.

Answer: D

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.1

TEXT LO: 2.4a Identify uses of various measures of central tendency and variability.

Topic: Statistics: The Language of Psychological Research

149. A restaurant owner asks a statistician to identify from the sales receipt records which value for a tip is most often given to servers during the breakfast rush. What measure of central tendency is she asking about?

- A) mean

Incorrect. The mean refers to the average of a data set.

- B) median

- C) mode

Correct. The mode is a measure of central tendency that refers to the most frequently appearing value in a data set.

- D) range

Answer: C

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.1

TEXT LO: 2.4a Identify uses of various measures of central tendency and variability.

Topic: Statistics: The Language of Psychological Research

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

150. On Friday Dr. Utts's history class took their first exam. On Monday, the students asked, "What was the most common grade on the exam, A, B, C, D, or F?" The students in Dr. Utts's class were asking about the _____ of the set of scores on the exam.

A) mean

Incorrect. The mean is the average of a data set.

B) mode

Correct. The mode is a measure of central tendency that refers to the most frequently appearing value in a data set.

C) median

D) range

Answer: B

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.1

TEXT LO: 2.4a Identify uses of various measures of central tendency and variability.

Topic: Statistics: The Language of Psychological Research

151. A British literature instructor examines the number of class periods his students have missed by mid-terms and has the following data: 1, 0, 10, 0, 2, 1, 0, 0, 5, 2, 3, 0, 0, 0, 1, 1, 2, 3, 1, 2.

What is the median for this data set?

A) 0

B) 1

Correct. Fifty percent of the data points occur below and above 1, so it is the median.

C) 1.7

Incorrect. 1.7 is the average of this data set, so it is the mean.

D) 2.5

Answer: B

Difficulty Level: Difficult

Skill: Analyze It

APA LO: 1.3

TEXT LO: 2.4a Identify uses of various measures of central tendency and variability.

Topic: Statistics: The Language of Psychological Research

152. In which situation would presenting the mean as one's measure of central tendency be *least* accurate?

A) when the distribution is normally distributed

B) when the distribution is negatively skewed

Correct. The mean is adversely affected by positively or negatively skewed data sets.

C) when the distribution is bimodal

Incorrect. A bimodal data set does not necessarily impact the meaning of that data set.

D) when there are many scores in the data set

Answer: B

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.3

TEXT LO: 2.4a Identify uses of various measures of central tendency and variability.

Topic: Statistics: The Language of Psychological Research

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

153. Kyle is collecting descriptive statistics for his psychology class and their performance on their first exam. The mode is a 45 out of 50, the median is 43, and the mean is 23. What conclusions could be drawn about this data set?

A) Most students scored very high on their exams, but a few very low scores occurred.

Correct. Because the mean is so much lower than the mode and median, the mean is being lowered by some very low scores.

B) The data must be incorrect because it would be impossible to have the mean, median, and mode be so diverse.

C) Most of the students scored very low on the test, but a few high scores occurred.

Incorrect. Because the mode and median are so high, many students must have actually scored high.

D) Most students scored very high, and no one scored below a 35.

Answer: A

Difficulty Level: Difficult

Skill: Analyze It

APA LO: 1.3

TEXT LO: 2.4a Identify uses of various measures of central tendency and variability.

Topic: Statistics: The Language of Psychological Research

154. If I wanted to determine, on average, how far apart any one score is from another, I should use a measure of _____.

A) central tendency

Incorrect. This identifies the "central" scores in a data set.

B) correlation

C) variability

Correct. Variability is a measure of how loosely or tightly bunched scores are.

D) statistical significance

Answer: C

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.4a Identify uses of various measures of central tendency and variability.

Topic: Statistics: The Language of Psychological Research

155. This simplest measure of variability is the _____.

A) mean

B) mode

C) range

Correct. The range consists of the difference between the highest and lowest scores.

D) standard deviation

Incorrect. The standard deviation is a complicated measure of variability.

Answer: C

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.1

TEXT LO: 2.4a Identify uses of various measures of central tendency and variability.

Topic: Statistics: The Language of Psychological Research

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

156. Which descriptive statistic is *least* likely to be influenced by the presence of skewed data?

A) mean

Incorrect. The mean is greatly impacted by extreme scores.

B) median

Correct. The median is the least impacted by extreme scores.

C) range

D) standard deviation

Answer: B

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.1

TEXT LO: 2.4a Identify uses of various measures of central tendency and variability.

Topic: Statistics: The Language of Psychological Research

157. Which of the following is one of the two types of statistics that researchers use to analyze the data that they collect?

A) referential statistics

B) inferential statistics

C) binomial statistics

D) cyclical statistics

Answer: B

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.4a Identify uses of various measures of central tendency and variability.

Topic: Statistics: The Language of Psychological Research

158. In a data set, the measure of variability that indicates how far each individual data point is from the average of the entire set is called the _____.

A) standard deviation

B) canonical correlation

C) regression from the mean

D) variance

Answer: A

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.4a Identify uses of various measures of central tendency and variability.

Topic: Statistics: The Language of Psychological Research

159. Mathematical methods that allow us to determine whether we can generalize findings from our sample to the full population are called _____.

A) central tendencies

B) inferential statistics

C) dispersion

D) descriptive statistics

Answer: B

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.4a Identify uses of various measures of central tendency and variability.

Topic: Statistics: The Language of Psychological Research

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

160. A researcher wishes to generalize his findings beyond the people at the organization he is studying in Florida. He wants to attempt to show that the findings apply to all people who work in a similar type of organization throughout the United States. He should use _____ to analyze his data.

A) correlational statistics

B) descriptive statistics

Incorrect. Descriptive statistics are used to describe a data set, not to generalize from a sample to a larger population.

C) inferential statistics

Correct. Inferential statistics are used to generalize findings from a sample to the larger population from which it was drawn.

D) logical statistics

Answer: C

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.4a Identify uses of various measures of central tendency and variability.

Topic: Statistics: The Language of Psychological Research

161. Mary conducts research examining the efficacy of treatment of elderly persons in nursing facilities in her home state. In order for her to use this research to influence larger political policies regarding the care of the elderly on a state and federal level, she will have to generalize her findings to the larger population of elderly nursing home residents. What sort of statistics should she use to accomplish this goal?

A) correlational statistics

B) descriptive statistics

Incorrect. Descriptive statistics are used to describe a data set, not to generalize from a sample to a larger population.

C) inferential statistics

Correct. Inferential statistics are used to generalize from a sample to the larger population from which it was drawn.

D) logical statistics

Answer: C

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.4b Explain how inferential statistics can help us to determine whether we can generalize from our sample to the full population.

Topic: Statistics: The Language of Psychological Research

162. When a given research finding is believed to have less than a _____ in 100 probability of occurring by chance, it is usually described as being statistically significant.

A) 1

B) 5

C) 10

D) 25

Answer: B

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.4b Explain how inferential statistics can help us to determine whether we can generalize from our sample to the full population.

Topic: Statistics: The Language of Psychological Research

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

163. To test a hypothesis we need to use _____.

A) inferential statistics

Correct. Inferential statistics allow us to draw conclusions about our hypothesis.

B) descriptive statistics

Incorrect. Descriptive statistics do not give enough information for us to draw conclusions about our hypothesis.

C) measures of central tendency

D) measures of validity

Answer: A

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.1

TEXT LO: 2.4b Explain how inferential statistics can help us to determine whether we can generalize from our sample to the full population.

Topic: Statistics: The Language of Psychological Research

164. The term *statistical significance* implies that the results are _____.

A) important

B) extremely meaningful

C) valid

D) not likely due to chance

Answer: D

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.4b Explain how inferential statistics can help us to determine whether we can generalize from our sample to the full population.

Topic: Statistics: The Language of Psychological Research

% correct 63 a = 6 b = 7 c = 23 d = 63 r = .32

165. _____ is based on the probability that the outcome in the test sample reflects a reliable pattern in the general population from which the sample was taken.

A) Descriptive statistics

B) Practical significance

Incorrect. Practical significance is whether or not there is a real-world significance for the data.

C) Inferential statistics

Correct. Inferential statistics determine the statistical significance of the data.

D) Meta-analysis

Answer: C

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.1

TEXT LO: 2.4b Explain how inferential statistics can help us to determine whether we can generalize from our sample to the full population.

Topic: Statistics: The Language of Psychological Research

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

166. What is the relationship between the p -value of a study and its statistical significance?

A) The higher the p -value, the greater the statistical significance.

Incorrect. This is the opposite of the correct answer. The higher the p -value, the lower the statistical significance.

B) The p -value is unrelated to the level of statistical significance.

C) The p -value is equal to the statistical significance.

D) The lower the p -value, the greater the statistical significance.

Correct. As p , or probability, drops, there is a greater chance that the findings are a real event and not caused by random chance or happenstance.

Answer: D

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.1

TEXT LO: 2.4b Explain how inferential statistics can help us to determine whether we can generalize from our sample to the full population.

Topic: Statistics: The Language of Psychological Research

167. A therapist wishes to show that his new therapy is a marked improvement over the current best available therapy. To do so, he examines the number of participants who improved with each. A total of 125 participants received his treatment (and 100 of them improved). A total of 80 participants received the alternative treatment (and 64 of them improved). What should the therapist conclude?

A) His treatment is superior to the alternative because 100 is greater than 64.

B) His treatment is no better than the alternative because the percentages are the same.

Correct. He has found the same probability in both cases, so there is no statistical difference between the two participant groups.

C) His treatment is inferior because the percentages are the same.

Incorrect. His treatment is neither inferior nor superior. His findings suggest that his treatment is equivalent.

D) His treatment is superior because it included 125 people as opposed to 80.

Answer: B

Difficulty Level: Difficult

Skill: Analyze It

APA LO: 1.3

TEXT LO: 2.4b Explain how inferential statistics can help us to determine whether we can generalize from our sample to the full population.

Topic: Statistics: The Language of Psychological Research

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

168.. After carefully observing thousands of students, Dr. O'Brien revealed to his colleagues that students with brown eyes are statistically more likely to write with pens instead of pencils. Although his colleagues did not question his statistics, they did suggest that a finding such as this lacked _____.

A) authenticity

B) standardization

Incorrect. There is nothing in this example that suggests a lack of standardization. The practical significance of his findings is rather small.

C) statistical measures

D) practical significance

Correct. Practical significance refers to whether a statistical difference "makes a difference" in the real world.

Answer: D

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.4b Explain how inferential statistics can help us to determine whether we can generalize from our sample to the full population.

Topic: Statistics: The Language of Psychological Research

169. Rose presented her data at a conference. She described how she studied the impact of nutrition on energy levels. Her experimental group ate only "super foods" for 30 days, while her control group continued to eat their regular diet. Each group filled out a questionnaire that asked them about their overall energy levels, and they had their metabolic rate measured. While there had been no change in the control group, when showing her graph to the other scientists, there appeared to be huge differences in energy levels for her "super food" group. They appeared to show much higher levels of energy. In reality, the "super foods" group only increased their energy level by 2 points. Why did the effect of the nutrition plan appear to be so much larger than it was?

A) Because there was no change in the control group, any change would look big.

B) Rose likely used a truncated graph, which makes changes look bigger than they are.

Correct. A truncated graph misrepresents the size of an effect because it does not use zero as its base for the axis of the graph.

C) The energy levels of both groups were artificially low because it was winter.

Incorrect. This is a very unlikely scenario and would have affected both groups equally.

D) Because the energy change would have such important practical significance, it was made to look bigger to focus on the importance.

Answer: B

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.4c Show how statistics can be misused for the purpose of persuasion.

Topic: Statistics: The Language of Psychological Research

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

170. Your text presents a few ways that people can use statistics to persuade others to change their behavior or to make decisions. One is through deception, and the other is _____.

A) to draw faulty conclusions about data or falsify the appearance of changes in data

Correct. Scientists or politicians can misrepresent their data to show bigger changes than there really are.

B) to allow confounds to impact the data without reporting it

Incorrect. While this could be a problem in any research study, it was not mentioned as a specific way that people use statistics to persuade others.

C) to conduct studies without gaining appropriate informed consent

D) to select biased samples from the population

Answer: A

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.3

TEXT LO: 2.4c Show how statistics can be misused for the purpose of persuasion.

Topic: Statistics: The Language of Psychological Research

171. A mechanism by which experts in a field carefully screen the work of their colleagues is known as _____.

A) experimental validity

B) experimenter bias effect

C) peer review

D) peer assessment

Answer: C

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.5a Identify flaws in research designs and how to correct them.

Topic: Evaluating Psychological Research

172. Dr. Romero is an expert in his field and he has been asked to read an article that was recently submitted to a journal. The article that was submitted is seeking publication in Dr. Romero's area of expertise. The editor who has asked for Dr. Romero's help is hoping that he will be able to _____.

A) add information to the article to make it more interesting

B) help format the paper so it looks better

C) identify any potential flaws in the research design or the reporting of the results

Correct. Dr. Romero is a peer reviewer, and his job is to identify flaws in the research described.

D) provide a rating for the practical significance of the research outlined in the article

Incorrect. Dr. Romero is a peer reviewer, but rating the value of the research is not a part of his responsibilities.

Answer: C

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.1

TEXT LO: 2.5a Identify flaws in research designs and how to correct them.

Topic: Evaluating Psychological Research

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

173. The peer review process is designed to _____.

- A) block alternative therapies from being made available to the general public
- B) identify flaws in a research study's methods, findings, and conclusions
- C) make researchers feel bad when their article is not published
- D) place obstacles in front of people whose theories differ from mainstream science

Answer: B

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.5a Identify flaws in research designs and how to correct them.

Topic: Evaluating Psychological Research

174. In one research project, a scientist gave students subliminal cassette tapes and told them to play them for 2 months. After 2 months, she assessed whether the tapes helped the self-esteem of her participants and found that self-esteem had indeed risen! While she may have attributed this to the tapes, it is also possible that those students may have found college life to be manageable and thus experienced an increase in self-esteem for that reason. This demonstrates which principle of critical thinking?

- A) correlation vs. causation
- B) extraordinary claims
- C) ruling out rival hypotheses

Correct. In this case, there are alternative explanations that must be considered before assuming that a research finding is accurate.

- D) replicability

Incorrect. Nothing in this example addresses repeating the research with the goal of producing the same findings.

Answer: C

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 2.1

TEXT LO: 2.5b Identify skills for evaluating psychological claims in the popular media.

Topic: Evaluating Psychological Research

% correct 59 a = 38 b = 0 c = 59 d = 3 r = .46

175. Dr. Kovaski conducts a study to determine if her new drug can relieve stress. Participants are measured on their stress levels, and only those with the very highest scores are selected for the study. Dr. Kovaski is honest in her informed consent and lets this high stress group know that they will be getting a drug that should reduce their stress. When compared with a low stress group that was used as a control, Dr. Kovaski draws the conclusion that her drug is extremely successful because stress levels go down in the experimental group. Which of the following is *not* a reason to question his conclusions?

A) He did not randomly select participants from the population of interest.

Incorrect. The fact that his participants were chosen because of a characteristic they had that was different from other participants is extremely concerning.

B) He should not have provided informed consent prior to the study.

Correct. Indeed, this is one of the things he did do correctly in his study, so this act alone would not bring his data into question.

C) His experimental and control groups were not equivalent groups before he began the study.

D) Participants were informed of the expectations of the experimenter.

Answer: B

Difficulty Level: Difficult

Skill: Analyze It

APA LO: 2.1

TEXT LO: 2.5b Identify skills for evaluating psychological claims in the popular media.

Topic: Evaluating Psychological Research

176. The general public is often misled by discussions of research in the media, because most reporters are _____.

A) not fair and balanced in their reporting of the facts

B) actively working to bias the public against scientific research

C) not trained in understanding research or how to accurately communicate about it

D) lazy and attempting to do as little as possible in their jobs

Answer: C

Difficulty Level: Easy

Skill: Understand the Concepts

APA LO: 1.3

TEXT LO: 2.5b Identify skills for evaluating psychological claims in the popular media.

Topic: Evaluating Psychological Research

177. Professor Bowden is in the middle of her lecture on marital satisfaction when a student in the back interrupts her and says, "Dr. Phil doesn't agree with that theory!" Soon other students chime in to add fuel to the discussion. Professor Bowden just smiles and asks the original student to produce the research that Dr. Phil carried out to justify his statements. What lesson is Professor Bowden trying to teach?

A) Information from the media is always inaccurate.

B) One should never question a well-established theory.

Incorrect. It is one of the most important aspects of critical thinking that the theories should be questioned, whether they are or are not well-established.

C) Always check the source of your information before you believe it.

Correct. The authors discuss how we should be skeptical of psychology-related claims in the media, and look for scientific evidence.

D) Secondary sources are just as reliable as primary sources.

Answer: C

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.5b Identify skills for evaluating psychological claims in the popular media.

Topic: Evaluating Psychological Research

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

178. A key factor to consider when reading about the results of a study on the Internet, in a newspaper, or in a news magazine is to

A) consider the source of the information.

Correct. One must always consider the source from which information is drawn.

B) determine how well it fits with what others have told you in the past.

C) rely on your common sense or "gut" intuition.

D) popular media outlets always have inaccurate information.

Incorrect. It is entirely possible that the results of the study reported on the Internet, a newspaper, or in a newsmagazine are accurate. One must simply not accept that to be the case just because it is published.

Answer: A

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.3

TEXT LO: 2.5b Identify skills for evaluating psychological claims in the popular media.

Topic: Evaluating Psychological Research

% correct 88 a = 88 b = 12 c = 0 d = 0 r = .34

179. A major limitation in reading about the results of psychological research in the newspaper is that _____.

A) reporters provide too much detailed information about the research study that the general public cannot comprehend in their articles

B) reporters are so well-trained to discuss research that they cannot easily communicate about it with the average lay person

C) reporters create controversy where none exists by treating scientific evidence and dissenter's biased opinions as equally compelling

Correct. This is an important point to make, because those without basis for opinions are often given the same weight as those who do have scientific basis for opinions.

D) reporters do not know how to identify experts to interview for many of their stories and end up unintentionally misleading the public

Incorrect. Reporters may very well know how to interview people for their stories, but may choose to do so in such a way that makes the stories more sensational.

Answer: C

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.3

TEXT LO: 2.5b Identify skills for evaluating psychological claims in the popular media.

Topic: Evaluating Psychological Research

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

180. The evening news just reported that cannabis has been shown to enhance learning and improve grades. The reporter describes data found by Joe's Smoke Shack that showed that regular users of cannabis scored higher than the general public on a general knowledge test. Hearing this news, what should you do first?

A) Start using cannabis daily if you don't already.

Incorrect. You don't know enough about this data to make that kind of decision.

B) Consider the source of the data.

Correct. Since this is being reported by Joe's Smoke Shack, there may be some ulterior motives to the news, or it may reflect a bias.

C) Call off future study sessions at your sorority, because members are prohibited from using cannabis.

D) Call your parents and ask for money so you can partake in cannabis before your exam on Friday.

Answer: B

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.5b Identify skills for evaluating psychological claims in the popular media.

Topic: Evaluating Psychological Research

181. _____ refers to the tendency to exaggerate the central message of a study.

A) Leveling

B) Sharpening

C) Edging

D) Falsifying

Answer: B

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.3

TEXT LO: 2.5b Identify skills for evaluating psychological claims in the popular media.

Topic: Evaluating Psychological Research

182. _____ is the appearance of a scientific controversy where none exists.

A) Leveling

B) Balancing

C) Sharpening

D) Pseudosymmetry

Answer: D

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.3

TEXT LO: 2.5b Identify skills for evaluating psychological claims in the popular media.

Topic: Evaluating Psychological Research

Fill-in-the-Blank

1. _____ communication is a process that involves one person sitting next to a child with autism spectrum disorder for the purpose of helping that child type out words and sentences. Research has demonstrated that it was an invalid way of assisting these children with communication deficits.

Answer: Facilitated

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.3

TEXT LO: Introduction

Topic: Introduction

2. A heuristic refers to a mental shortcut or _____ that assists people with intuitive decision-making problems.

Answer: rule of thumb

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.1a Identify two modes of thinking and their application to scientific reasoning.

Topic: The Beauty and Necessity of Good Research Design

3. If a researcher investigated the topic of aggression by simply recording instances of aggression on a school playground, in a place of business, in a nightclub, and in many other everyday settings, he or she would be using the research design of _____.

Answer: naturalistic observation

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.1

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

4. _____ is the most important part of ensuring the generalizability of one's results to the general population.

Answer: Random selection

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 2.1

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

5. Dr. Barrios is examining the relationship between student scores on a practice test in his senior-level class with their actual performance, with different questions, on his first exam. If there is consistency or stability in these scores, Dr. Barrios would be able to say that _____ exists.

Answer: reliability

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.1

TEXT LO: 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

6. An important concern in research is that people will respond in a manner that conveys a specific impression rather than in a way that reflects his or her true behavior. If a person does this to make themselves appear more skilled than they really are, he or she is engaging in a(n) _____.

Answer: response set

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 2.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

7. _____ is the degree of statistical association between two variables.

Answer: Correlation (Correlation coefficient is also correct.)

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

8. The major advantage of a correlational design over a naturalistic observation or a case study design is that a correlational design allows us to _____.

Answer: make predictions (or make predictions about future events or describe and make predictions about behavior)

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.3

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

9. When one variable under investigation rises while the second variable under investigation drops, a(n) _____ correlation would be the result.

Answer: negative

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

10. According to the authors, many superstitious behaviors result from _____.

Answer: illusory correlation

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.3

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

11. It is only possible to draw cause-and-effect conclusions about research data when employing a(n) _____ design.

Answer: experimental

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

12. When a researcher provides a specific definition of the independent and dependent variables for the purpose of a study, they are creating _____ definitions for the research.

Answer: operational

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

13. When a(n) _____ variable exists, the ability to state that differences in the conditions of the independent variable led to the observed differences in the dependent variable is lessened.

Answer: confounding

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

14. The two major features of an experiment—random assignment and manipulations of an independent variable—permit the researcher to infer _____ and _____ relationships between variables.

Answer: cause, effect

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

15. Although, physiologically speaking, it should take approximately 30 minutes for an aspirin to relieve a headache, most people claim to feel better only minutes after taking the pill. This observation can best be explained by the _____ effect.

Answer: placebo

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

16. One important limitation of the experimental design is that when research participants know what condition they have been assigned to, this knowledge, rather than the independent variable, may be the cause of the differences observed in the dependent variable. This is known as the _____ effect.

Answer: placebo (nocebo is also correct)

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

17. When neither the experimenter nor the participant have any knowledge of the experimental condition to which the participant has been assigned, we say that this is a _____ study.

Answer: double-blind

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

18. In psychological research studies, the researcher is required to obtain the participant's _____.

Answer: informed consent

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 3.1

TEXT LO: 2.3a Explain the ethical obligations of researchers toward their research participants.

Topic: Ethical Issues in Research Design

19. Dr. Friesz asks his research assistant to gather information on how his data are clustering together on his dependent variable, average daily temperature for December. He is asking for a measure of _____.

Answer: central tendency

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.1

TEXT LO: 2.4a Identify uses of various measures of central tendency and variability.

Topic: Statistics: The Language of Psychological Research

20. In the following list of scores, _____ represents the median score. Scores: 5, 3, 7, 3, 9.

Answer: 5

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.1

TEXT LO: 2.4a Identify uses of various measures of central tendency and variability.

Topic: Statistics: The Language of Psychological Research

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

21. The preferred measure of variability in descriptive statistics is the _____.

Answer: standard deviation

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.1

TEXT LO: 2.4a Identify uses of various measures of central tendency and variability.

Topic: Statistics: The Language of Psychological Research

22. In the following list of scores, the _____ represents the mode. Scores: 1, 5, 2, 1, 3

Answer: 1

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.1

TEXT LO: 2.4a Identify uses of various measures of central tendency and variability.

Topic: Statistics: The Language of Psychological Research

23. The goal of inferential statistics is to _____ our results to the full population.

Answer: generalize (apply is also correct)

Difficulty Level: Easy

Skill: Remember the Facts

APA LO: 1.1

TEXT LO: 2.4a Identify uses of various measures of central tendency and variability.

Topic: Statistics: The Language of Psychological Research

24. Before Dr. Smith submits his new grant proposal to the committee, he asks several of his colleagues to read, revise, and make suggestions about his research design. He is engaging in one form of _____.

Answer: peer review

Difficulty Level: Moderate

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.5a Identify flaws in research designs and how to correct them.

Topic: Evaluating Psychological Research

25. Jay is writing an article for the school newspaper about student attendance. His main point is that during the final semester of one's senior year, a student is more likely to miss school. Data obtained from his principal indicate that, on any given day, 17% of the senior class is absent (compared to 12% of juniors, and 13% and 16% of sophomores and freshmen). His headline reads "Senioritis: A Real Phenomenon." He has engaged in use of the misleading tool of _____.

Answer: leveling

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.5b Identify skills for evaluating psychological claims in the popular media.

Topic: Statistics: The Language of Psychological Research

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

26. When the media provide information about a scientific question, it often does so using a balanced coverage approach. This creates an artificial appearance of _____, and thus gives the impression that a scientific debate exists where it does not.

Answer: pseudosymmetry

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.3

TEXT LO: 2.5b Identify skills for evaluating psychological claims in the popular media.

Topic: Statistics: The Language of Psychological Research

Essay

1. Why is it necessary for psychologists to have so many different research designs to study human behavior?

Answer: Answers will vary but should contain the following points for full credit.

- Each research design has its own important limitations. Students should identify at least two examples from two different designs to earn full credit.
- The goals of research differ (some focus on description, others on predictions, and others on establishing causation).
- If different methods produce similar results, this increases our confidence in our understanding of a particular phenomenon (idea of convergence).

Difficulty Level: Difficult

Skill: Analyze It

APA LO: 2.1

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.; 2.2d Identify the components of an experiment and the potential pitfalls that can lead us to faulty conclusions and how psychologists control for these pitfalls.

Topic: Scientific Methodology: A Toolbox of Skills

2. Discuss how the concept of the illusory correlation would explain a friend's complaint that his fraternity/her sorority (or other student group) is always being displayed in a negative light by the campus newspaper while other groups are not treated the same.

Answer: Answers will vary but should include the following to earn full credit.

- Student should define or describe what the illusory correlation is in his/her answer (either directly or demonstrate an understanding indirectly).
- The student should discuss the general ideas associated with the "Great Fourfold Table of Life" (Table 2.2).
- More specifically, he or she should focus on the fact that the student—in the question—is focusing on instances where negative portrayal of the fraternity/sorority are occurring but is neglecting stories about the fraternity/sorority that are positive or have no evaluative component. Likewise, the student—in the question—is also ignoring when other groups are discussed negatively or other negative stories that are irrelevant to friend's group are published.

Difficulty Level: Difficult

Skill: Apply What You Know

APA LO: 1.3

TEXT LO: 2.2c Describe the role of correlational designs and distinguish correlation from causation.

Topic: Scientific Methodology: A Toolbox of Skills

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

3. Describe the roles of institutional review boards and statements of informed consent within the human research process.

Answer: Answers will vary but should contain the following for full credit.

- Institutional review boards (IRBs) exist to ensure that participants are protected against abuses from researchers. The members are drawn from different departments and must give their approval, and their concerns and requests for changes addressed, before research with human participants may begin.
- The informed consent ensures that participants understand what is being asked of them and what will be involved in their experience. Participants must be given enough information to make a decision to voluntarily participate in the research. If they are misled during the research, the missing information must be explained during a debriefing.

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 3.1

TEXT LO: 2.3a Explain the ethical obligations of researchers toward their research participants.

Topic: Ethical Issues in Research Design

4. Describe the two sides of the argument for and against the use of nonhuman animal subjects in psychological research.

Answer: Answers will vary but should contain the following information for full credit.

- Nonhuman animal research has led to our understanding of human learning, brain physiology, and psychological treatment.
- There are often no good alternatives to using nonhuman animals.
- Concerns about the treatment of laboratory animals (ex: housing and feeding)
- Large number of nonhuman animals are killed each year, and there are questions about whether nonhuman animals research offers sufficient external validity to justify its use.

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 3.1

TEXT LO: 2.3b Describe both sides of the debate on the use of nonhuman animals as research subjects.

Topic: Ethical Issues in Research Design

5. Explain why no single measure of central tendency and measure of variability exists that a researcher can use every single time.

Answer: Answers will vary but should contain the following information for full credit.

- Sometimes one measure is more appropriate than another. For example, the mean is distorted by the presence of outliers in a skewed distribution, so a researcher would be advised to report the median instead.
- It depends what information a researcher wants to highlight. For example, if a researcher wants to identify what was the most frequently endorsed option for a question, he or she would choose the mode. If he or she wants to report about how the scores were represented over all the possible answers, he or she would report the mean.
- Some people may wish to know the typical difference between scores and thus choose standard deviation, while others would look at the amount of difference from the most extreme scores and choose the range.
- A researcher cannot just report central tendency or dispersion because they each only tell part of the whole, either where scores are located (central tendency) or how much difference between scores is present (dispersion).

Difficulty Level: Difficult

Skill: Analyze It

APA LO: 1.1

TEXT LO: 2.4a Identify uses of various measures of central tendency and variability.

Topic: Statistics: The Language of Psychological Research

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

6. Illustrate why being an informed consumer about research, research designs, and statistics will be helpful in identifying incorrect statements about research in the media and on the Internet.

Answer: Answers will vary but should contain *at least four* of the following, and include the first idea, for full credit.

- Student should mention that understanding research designs will aid in identifying when statements of cause and effect are appropriate and when they are not. (Need to give supportive evidence for this and all statements to see that they truly demonstrate an understanding of each idea.)
- One will recognize misleading or inaccurate statistical statements.
- One will recognize when headlines are inaccurate summaries of the research results.
- One will recognize when reporters or writers have used sharpening or leveling.
- One will consider the source and whether the story coverage is balanced or whether it muddies the discussion.

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.3

TEXT LO: 2.5b Identify skills for evaluating psychological claims in the popular media.

Topic: Evaluating Psychological Research

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

Critical Thinking

1. Discuss why researchers need to be familiar with both descriptive and inferential statistics.

Answer: Answers will vary but should contain the following ideas for full credit.

- Student needs to mention that each gives a different kind of information because each has differing goals (organization and summarization for descriptive and generalization for inferential).
- Techniques in each can be misused in different ways to make effects appear that really are not accurate or appropriate.
- Often both are used in conjunction by the researcher rather than being two types that are chosen between (e.g., using the means of the groups to help see the statistically significant group differences).

Difficulty Level: Moderate

Skill: Understand the Concepts

APA LO: 1.1

TEXT LO: 2.4a Identify uses of various measures of central tendency and variability.

Topic: Statistics: The Language of Psychological Research

CHAPTER 2: RESEARCH METHODS

Finding Relationships

1. A large group of people whom you want to know about is called a _____.

- a. control group
- b. treatment group
- c. population
- d. sample

Answer c % correct 79 a= 3 b= 3 c= 79 d= 16 r= .30

2. In an experiment to test the effects of anxiety on performance, the dependent variable is the _____.

- a. amount of anxiety
- b. age of the person
- c. person's performance
- d. cause of the anxiety

Answer c % correct 76 a= 18 b= 1 c= 76 d= 5 r= .30

3. A scientist, conducting a research study on sleep and learning, questions her own objectivity and decides to let a third person, not associated with conducting the experiment, score the tests. The scientist is probably trying to eliminate _____.

- a. experimenter bias
- b. sample bias
- c. control bias
- d. treatment bias

Answer a % correct 95 a= 95 b= 2 c= 3 d= 1 r= .25

4. Psychologists use research techniques based on _____.

- a. inductive reasoning
- b. objective introspection
- c. deductive reasoning
- d. the scientific method

Answer d % correct 86 a= 6 b= 3 c= 5 d= 86 r= .36

5. Research in which a carefully selected group of people is asked a set of predetermined questions in interviews or through questionnaires is known as _____.

- a. correlational research
- b. case study research
- c. survey research
- d. experimental research

Answer c % correct 83 a= 4 b= 13 c= 83 d= 0 r= .20

6. In an experiment, a researcher manipulates one variable to see how it affects a second variable. The second variable, which is observed for any possible effects, is called the _____.

- a. dependent variable
- b. control variable
- c. independent variable
- d. hypothetical variable

Answer a % correct 78 a= 78 b= 8 c= 9 d= 4 r= .47

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

7. A psychologist, studying pilot trainees, picks a select group of trainees who are hopefully representative of all other trainees. The group of trainees being studied by this psychologist are collectively known to researchers as a _____.

- a. sample
- b. population
- c. target group
- d. control group

Answer a % correct 81 a= 81 b= 8 c= 7 d= 4 r= .46

8. Expectations by the experimenter that might influence the results of an experiment or their interpretation are called _____.

- a. experimental blinds
- b. experimenter bias
- c. sample bias
- d. treatment bias

Answer b % correct 97 a= 1 b= 97 c= 1 d= 1 r= .29

9. In a controlled experiment, the group subjected to a change in the independent variable is called the _____ group.

- a. independent
- b. experimental
- c. dependent
- d. control

Answer b % correct 77 a= 2 b= 77 c= 9 d= 12 r= .34

10. A scientist conducting a research study on anxiety and memory knows the experimental treatment for each of the participants in her study. She is concerned about her own objectivity and decides to have another researcher not aware of the experimental conditions score the tests. The scientist is trying to eliminate _____.

- a. experimenter bias
- b. sample bias
- c. control bias
- d. treatment bias

Answer a % correct 96 a= 96 b= 0 c= 4 d= 0 r= .21

11. An experimenter is studying new college students and their anxiety. He selects a random group of freshmen who should be representative of most freshmen entering the college. This is known as his _____.

- a. control group
- b. target group
- c. treatment group
- d. sample

Answer d % correct 89 a= 1 b= 9 c= 1 d= 89 r= .28

12. If explanation of the causes of thoughts, feelings, and behavior is a psychologist's goal, then the _____ method of research should be used.

- a. correlational
- b. experimental
- c. survey
- d. naturalistic observation

Answer b % correct 45 a= 15 b= 45 c= 14 d= 26 r= .52

13. In a controlled experiment, the group not subjected to a change in the independent variable, and used for comparison with the group receiving the experimental change, is the _____ group.

- a. independent
- b. experimental
- c. dependent
- d. control

Answer d % correct 90 a= 3 b= 4 c= 4 d= 90 r = .42

14. A research method in which the real-life behavior of a pre-selected person or a group is studied at an in-depth level for some time through the use of observation, interviews, and writings (such as letters) is the _____ method of research.

- a. survey
- b. psychometric
- c. case study
- d. naturalistic observation

Answer c % correct 95 a= 3 b= 1 c= 95 d= 2 r = .20

15. In an experiment, a researcher manipulates one variable to see how it affects a second variable. The manipulated variable is called the _____.

- a. dependent variable
- b. experimental variable
- c. independent variable
- d. placebo

Answer c % correct 80 a= 14 b= 5 c= 80 d= 1 r = .45

16. A group of students was asked to write an essay in support of the legalization of marijuana. They were paid \$.50. Another group of students received \$2.00 for the same task. It was subsequently found that those students who received only \$.50 developed a more positive attitude towards the legalization of marijuana. The experiment in this study was using (the) _____.

- a. correlational method
- b. experimental method
- c. naturalistic observation
- d. survey research

Answer b % correct 44 a= 47 b= 44 c= 1 d= 8 r = .31

17. A sample that does not truly represent the population in question is known as a _____ sample.

- a. random
- b. chance
- c. biased
- d. representative

Answer c % correct 85 a= 13 b= 1 c= 85 d= 2 r = .36

18. A weakness of _____ is that subjects participating in the research often report, consciously and unconsciously, inaccurate information.

- a. naturalistic observation
- b. surveys
- c. field experiments
- d. laboratory experiments

Answer b % correct 80 a= 2 b= 80 c= 10 d= 8 r = .24

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

19. To obtain objective information, researchers sometimes must deceive their participants. Ethically, research involving deception must always _____.

- a. pay participants to participate in the study
- b. maintain subject anonymity but never let on that the participants were deceived
- c. use double-blind controls and make sure the experimenter does not know who participated in the control and experimental groups
- d. explain the deception to the subjects after the data are collected and obtain their informed consent to use the information obtained

Answer d % correct 95 a= 0 b= 3 c= 3 d= 95 r = .34

20. As part of an assignment, Bill's class was asked to complete an anonymous questionnaire on prejudice. Which research method was Bill's professor using?

- a. field experiment
- b. survey
- c. naturalistic observation
- d. laboratory experiment

Answer b % correct 98 a= 1 b= 98 c= 1 d= 1 r = .24

21. To determine if sugar-rich diets affect hyperactivity in kids, a researcher prepared two daily menus that children would receive for a 30-day period. A high-sugar diet was given to one randomly selected group of children, while another randomly selected group of children had a menu that seemed identical but was not a high-sugar diet. At the end of 30 days, the two groups were evaluated to determine their levels of hyperactivity. In the study, the high-sugar diet is the _____.

- a. placebo
- b. independent variable
- c. dependent variable
- d. control group

Answer b % correct 65 a= 8 b= 65 c= 13 d= 14 r = .51

22. Using both independent and dependent variables is associated with which of the following types of research used in psychology?

- a. experimentation
- b. naturalistic observation
- c. correlation
- d. correlation and experimentation

Answer a % correct 55 a= 55 b= 1 c= 5 d= 39 r = .23

23. Manipulating an independent variable in a real-life setting is _____.

- a. an experiment
- b. an example of naturalistic observation
- c. a field experiment
- d. unethical

Answer c % correct 65 a= 17 b= 11 c= 65 d= 6 r = .45

24. Almost all research done in psychology is analyzed _____.

- a. visually
- b. using correlational techniques
- c. statistically
- d. at the .1 level

Answer c % correct 51 a= 13 b= 31 c= 51 d= 4 r = .34

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

25. A researcher is interested in understanding people's beliefs and behaviors. He asks randomly selected people to complete an anonymous questionnaire on sexual discrimination. Which research method was this experimenter using?

- a. field experiment
- b. survey
- c. naturalistic observation
- d. laboratory experiment

Answer b % correct 97 a= 2 b= 97 c= 1 d= 0 r = .27

26. Collecting objective data without interference in the subject's normal environment is associated with _____.

- a. survey research
- b. applied research
- c. laboratory research
- d. naturalistic observation

Answer d % correct 95 a= 1 b= 1 c= 2 d= 95 r = .23

27. Experimenter bias can best be controlled using _____.

- a. a placebo
- b. double-blind control
- c. randomization
- d. subjects who do not know the purpose of the study

Answer b % correct 79 a= 2 b= 79 c= 16 d= 4 r = .46

28. A researcher, based on her review of relevant scientific studies, believes that there is a relationship between the frequency of a baby's crying and whether it was nursed at set intervals or on a demand schedule. If this belief were tested by experimentally manipulating feeding schedules, the feeding schedule would be called the _____.

- a. independent variable
- b. dependent variable
- c. extraneous variable
- d. control factors

Answer a % correct 76 a= 76 b= 17 c= 1 d= 6 r = .44

29. A researcher, based on her review of relevant scientific studies, believes that there is a relationship between the frequency of a baby's crying and whether it was nursed at set intervals or on a demand schedule. If this belief were tested by experimentally manipulating feeding schedules, frequency of crying would be called the _____.

- a. latent factor
- b. dependent variable
- c. independent variable
- d. control factor

Answer b % correct 64 a= 24 b= 64 c= 24 d= 9 r = .43

30. One of the main reasons for using a laboratory for psychological research is to _____.

- a. prevent subjects from escaping
- b. study behavior in a natural setting
- c. do large-scale studies
- d. allow the researchers to control certain factors

Answer d % correct 98 a= 0 b= 0 c= 2 d= 98 r = .33

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

31. The process of establishing causal relationships is associated most with _____.

- a. naturalistic observation
- b. experiments
- c. correlation
- d. surveys

Answer b % correct 33 a= 45 b= 33 c= 14 d= 9 r = .43

32. A researcher tests the hypothesis that students who study in the room where they take their tests will perform better on the tests than students who study in other rooms. She requires one group to study in the classroom where the exam is given and another group to study in the library. All students take the test in the classroom, and their test performance is compared. In this example, where students study is the _____.

- a. independent variable
- b. dependent variable
- c. manipulation
- d. hypothesis

Answer a % correct 64 a= 64 b= 22 c= 10 d= 3 r = .27

33. A researcher tests the hypothesis that students who study in the room where they take their tests will perform better on the tests than students who study in other rooms. She requires one group to study in the classroom where the exam is given and another group to study in the library. All students take the test in the classroom, and their test performance is compared. In this example, test performance is _____.

- a. the dependent variable
- b. the independent variable
- c. the manipulation
- d. the control group

Answer a % correct 67 a= 67 b= 16 c= 11 d= 7 r = .47

34. In psychological studies, randomization is used to ensure that _____.

- a. there will be an independent and dependent variable
- b. each person has an equal chance of being assigned to each group
- c. the control group does not know the purpose of the study
- d. the experimenter won't know who is in each group

Answer b % correct 84 a= 5 b= 84 c= 3 d= 7 r = .33

35. A "fake treatment" is one way to define a _____.

- a. decoy
- b. demand characteristic
- c. control group
- d. placebo

Answer d % correct 81 a= 7 b= 6 c= 6 d= 81 r = .39

36. In an experiment, a researcher wants to understand the relationship between two variables. The experimenter will use a(n) _____ method.

- a. experimental
- b. correlational
- c. definitive
- d. questionnaire

Answer b % correct 83 a= 12 b= 4 c= 83 d= 1 r = .46

37. In an experiment, a researcher manipulates one variable to see how it affects a second variable. The second variable, which is observed for any possible effects, is called the _____.

- a. dependent variable
- b. control variable
- c. independent variable
- d. hypothetical variable

Answer a % correct 87 a= 87 b= 1 c= 10 d= 3 r= .40

38. The method of psychological research which utilizes a control group, a dependent variable, and an independent variable is _____.

- a. the experiment
- b. the survey
- c. the case study
- d. naturalistic observation

Answer a % correct 93 a= 93 b= 0 c= 4 d= 3 r= .21

39. Professor McSpell designed an experiment to test her hypothesis that exercise will increase spelling ability. She divided children into three groups and had one group do 10 minutes of exercises, one group do 30 minutes of exercises, and the third group do no exercise. She then tested all three groups of children to see how many words they could spell correctly on a spelling test. In this experiment, the scores on the spelling test serve as the _____.

- a. dependent variable
- b. independent variable
- c. control group
- d. reliability measure

Answer a % correct 85 a= 85 b= 8 c= 0 d= 7 r= .46

40. Which of the following is a strength of experiments?

- a. They cannot be repeated by anyone other than the experimenter.
- b. They allow for the establishment of cause-effect relationships.
- c. They are not subject to demand characteristics since the subjects do not know they are being observed.
- d. They allow us to draw definitive conclusions about behavior in the natural environment based on subjects' behavior in the laboratory.

Answer b % correct 71 a= 0 b= 71 c= 5 d= 23 r= .25

41. In an experiment, the "measurable aspect of the behavior of the subject" is called the _____ variable.

- a. dependent
- b. focal
- c. independent
- d. control

Answer a % correct 76 a= 76 b= 1 c= 20 d= 3 r= .47

42. The purpose of an experiment is to discover whether there is a relationship between the _____ and the _____.

- a. independent variable; control variable
- b. dependent variable; control variable
- c. control group; experimental group
- d. independent variable; dependent variable

Answer d % correct 69 a= 4 b= 3 c= 24 d= 69 r= .30

43. Cause-and-effect conclusions can be drawn from the results of an experiment because _____.

- a. it is almost always performed in a laboratory setting
- b. statistical analysis can be applied to data from an experiment
- c. the independent variable is manipulated while other possible causes of change in the dependent variable are held constant
- d. several groups of subjects, not just one sample, are typically investigated in a laboratory experiment

Answer c % correct 68 a= 4 b= 15 c= 68 d= 13 r = .28

44. To determine the impact of an independent variable on a dependent variable, the resulting measures must be _____ analyzed.

- a. visually
- b. mechanistically
- c. statistically
- d. critically

Answer c % correct 59 a= 15 b= 23 c= 59 d= 3 r = .27

45. In an experiment on the effects of level of motivation on the performance of typists, the researcher randomly assigned one third of her subjects to each of three levels of motivation (and then induced different levels of motivation in the three groups). She measured the average words typed per minute by each group, and found that performance was highest under medium motivation, average under low motivation, and worst under high motivation. What was the independent variable in this experiment?

- a. motivation
- b. typing speed
- c. variation in typing speed
- d. manipulation of typing speed

Answer a % correct 85 a= 85 b= 10 c= 3 d= 2 r = .40

46. A psychologist wanted to see if people are more prone to seek the company of others when anxious than when calm. He randomly assigned half of his subjects to an anxiety group and then told them that, as part of the study, they would receive electric shocks. He did not frighten the other group of subjects. Finally, he recorded how many subjects in each group chose to be "tested" in a group setting and how many chose to be "tested" alone. What was the independent variable in this study?

- a. tendency to desire the company of others
- b. level of shock
- c. level of anxiety
- d. the anxious group

Answer c % correct 54 a= 15 b= 22 c= 54 d= 9 r = .30

47. In an experiment, four groups of college students used different memorizing strategies to learn the material in one chapter of a textbook. Then each group was given the same multiple-choice test on the material. What was the dependent variable in this study?

- a. the students' performance on the test
- b. the four different groups
- c. the four different memorizing strategies
- d. manipulation of memorizing strategies

Answer a % correct 79 a= 79 b= 7 c= 9 d= 5 r = .58

48. A psychologist wanted to see if people are more prone to seek the company of others when anxious than when calm. He randomly assigned half of his subjects to an anxiety group and then told them that, as part of the study, they would receive electric shocks. He did not frighten the other group of subjects. Finally, he recorded how many subjects in each group chose to be "tested" in a group setting and how many chose to be "tested" alone. What was the dependent variable in this study?

- a. the two groups
- b. the level of anxiety
- c. preference for being alone or in a group
- d. manipulation of anxiety

Answer c % correct 77 a= 4 b= 10 c= 77 d= 10 r = .64

49. A psychologist wanted to see if people are more prone to seek the company of others when anxious than when calm. He randomly assigned half of his subjects to an anxiety group and then told them that, as part of the study, they would receive electric shocks. He did not frighten the other group of subjects. Finally, he recorded how many subjects in each group chose to be "tested" in a group setting and how many chose to be "tested" alone. In this study, the group that was NOT frightened would be called the _____ group.

- a. experimental
- b. control
- c. placebo
- d. test

Answer b % correct 90 a= 8 b= 90 c= 2 d= 0 r = .27

50. The purpose of a control group in an experiment is to _____.

- a. provide a comparison group in which no manipulation occurred
- b. increase the ability to generalize the findings
- c. manipulate the dependent variable
- d. represent the general, nonlaboratory population

Answer a % correct 59 a= 59 b= 5 c= 6 d= 30 r = .28

51. In an experiment, the group of subjects to which the experimental group is compared is called the _____.

- a. comparison group
- b. standard group
- c. confederate group
- d. control group

Answer d % correct 97 a= 2 b= 1 c= 0 d= 97 r = .21

52. In an experiment concerning the effect of auditory feedback on accuracy in writing computer programs, one group hears a computer-simulated voice say each character or symbol that they type in as they are writing their programs. The second group does not receive the auditory feedback as they type their program lines. This second group is the _____ group.

- a. experimental
- b. control
- c. placebo
- d. confederate

Answer b % correct 79 a= 16 b= 79 c= 3 d= 3 r = .25

53. Why is it essential that the experimental and control groups be treated identically in every respect but one?

- a. So that the dependent variable can be accurately measured.
- b. So that the results will apply outside the laboratory setting.
- c. So that if the behavior of the two groups differs, the difference can be credited to the one thing that distinguished the groups from one another.
- d. So that if the behavior of the two groups differs, that difference can be used to establish a functional relationship between the independent and dependent variables.

Answer d % correct 40 a= 9 b= 1 c= 50 d= 40 r= .26

54. In an experiment, a researcher manipulates the amount of sleep participants get while measuring their performance on a stress test the next day. The independent variable is _____.

- a. amount of sleep
- b. performance on memory task
- c. whether or not they sleep
- d. performance on the stress test

Answer a % correct 77 a= 17 b= 6 c= 77 d= 0 r= .40

55. In an experiment, a researcher manipulates the amount of sleep participants get while measuring their performance on a stress test the next day. The dependent variable is _____.

- a. amount of sleep
- b. whether they slept or not
- c. performance on the stress test
- d. performance on a sleep task

Answer c % correct 83 a= 83 b= 2 c= 14 d= 1 r= .45

56. As part of an assignment, Rick's class was asked to complete an anonymous questionnaire on female sexual harassment. Which research method was Rick's professor using?

- a. field experiment
- b. survey
- c. naturalistic observation
- d. laboratory experiment

Answer b % correct 97 a= 1 b= 97 c= 1 d= 0 r= .26

57. Collecting objective data without interference in the subject's normal environment is associated with _____.

- a. survey research
- b. applied research
- c. laboratory research
- d. naturalistic observation

Answer d % correct 94 a= 1 b= 2 c= 3 d= 94 r= .25

58. To determine if the number of friendships kids have affect depression in kids, a researcher looks at depression rates in kids who report having a high number of friends and compares it to depression rates in kids who report a small number of friends. In the study, the reported number of friendships is the _____.

- a. placebo
- b. independent variable
- c. dependent variable
- d. control group

Answer b % correct 82 a= 3 b= 82 c= 9 d= 5 r= .49

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

59. An experiment was run in which group A was given 3 minutes to study a word list, while group B was given 10 minutes to study the same list. Later, both groups were asked to recall words from the list. In this study, the number of words recalled is the _____.

- a. independent variable
- b. dependent variable
- c. placebo
- d. control group

Answer b % correct 82 a= 10 b= 82 c= 5 d= 3 r= .40.

60. Dr. Welsh is doing experiments using drugs. He is concerned that his subjects will respond to demand characteristics. He may want to control for this by using which of the following?

- a. stratification
- b. two independent variables
- c. a placebo
- d. randomization

Answer c % correct 70 a= 4 b= 5 c= 70 d= 21 r= .33

61. Mr. Marshall hired June to collect data from a group of subjects. Neither June nor the subjects were aware of the independent variable that Mr. Marshall had manipulated. This is an example of _____.

- a. randomization
- b. a placebo
- c. double-blind control
- d. experimenter bias

Answer c % correct 97 a= 2 b= 1 c= 97 d= 1 r= .20

62. Which of the following is NOT a strength of the experiment as a research method?

- a. Cause-and-effect relationships can be established.
- b. Experimental conditions usually seem realistic to subjects.
- c. Experiments can usually be replicated if the findings are valid.
- d. Variables can be analyzed carefully because of the degree of control over them.

Answer b % correct 72 a= 11 b= 72 c= 2 d= 15 r= .23

63. Keeping responses anonymous helps researchers avoid the ethical problem of _____.

- a. deception
- b. experimenter bias
- c. invasion of privacy
- d. animal rights violations

Answer c % correct 70 a= 7 b= 21 c= 70 d= 2 r= .41

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

Revel Quizzes

The following questions appear at the end of each module and at the end of the chapter in Revel.

Quiz 2.1: The Beauty and Necessity of Good Research Design

EOM Q2.1.1

Nobel prize winner Daniel Kahneman refers to intuitive thinking as System 1. What type of thinking does Kahneman refer to as System 2?

- a) analytical
- b) speculative
- c) descriptive
- d) impressionistic

ANS: a

Topic=The Beauty and Necessity of Good Research Design

Skill=Remember the Facts

Objective=LO 2.1a Identify two modes of thinking and their application to scientific reasoning

Difficulty=Easy

Consider This: We engage in this type of thinking whenever we are trying to reason through a problem. LO 2.1a Identify two modes of thinking and their application to scientific reasoning

EOM Q2.1.2

The cases of facilitated communication and lobotomies demonstrate that good research design is important because intelligent, well-trained people _____.

- a) can be swayed into believing that a treatment is effective when it is not
- b) usually do not conduct experiments
- c) can be passively cruel in their pursuit of an outcome
- d) only seek confirmatory evidence of their beliefs

ANS: a

Topic=The Beauty and Necessity of Good Research Design

Skill=Understand the Concepts

Objective=LO 2.1a Identify two modes of thinking and their application to scientific reasoning

Difficulty=Moderate

Consider This: These people also relied on intuitive thinking, relying largely on heuristics to infer whether a treatment was effective. LO 2.1a Identify two modes of thinking and their application to scientific reasoning

EOM Q2.1.3

A mental shortcut or “rule of thumb” is referred to as a(n) _____ by psychologists.

- a) heuristic
- b) algorithm
- c) intuition
- d) deliberation

ANS: a

Topic=The Beauty and Necessity of Good Research Design

Skill=Remember the Facts

Objective=LO 2.1a Identify two modes of thinking and their application to scientific reasoning

Difficulty=Easy

Consider This: These shortcuts can be useful, but sometimes they can let us down. LO 2.1a Identify two modes of thinking and their application to scientific reasoning

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Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

EOM Q2.1.4

Jorge's classmate arrived late to class and threw her backpack down as she slid into her seat in the third row. Jorge immediately assumed that his classmate was irresponsible and had slept late after a night of partying. Jorge relied on _____ to reach his conclusion. Jorge later found out that his classmate was late because her appointment at the hospital for her cancer treatments had started late.

- a) System 1 thinking
- b) reflective thinking
- c) analytical thinking
- d) System 2 thinking

ANS: a

Topic=The Beauty and Necessity of Good Research Design

Skill=Apply What You Know

Objective=LO 2.1a Identify two modes of thinking and their application to scientific reasoning

Difficulty=Difficult

Consider This: Jorge did what most of us would do when observing the behavior of others, although the result was incorrect. LO 2.1a Identify two modes of thinking and their application to scientific reasoning

EOM Q2.1.5

Analytical thinking is _____ compared to intuitive thinking.

- a) slow
- b) immediate
- c) painful
- d) heuristic

ANS: a

Topic=The Beauty and Necessity of Good Research Design

Skill=Remember the Facts

Objective=LO 2.1a Identify two modes of thinking and their application to scientific reasoning

Difficulty=Easy

Consider This: Modes of thinking have different strengths and weaknesses. LO 2.1a Identify two modes of thinking and their application to scientific reasoning

Quiz 2.2: Scientific Methodology: A Toolbox of Skills

EOM Q2.2.1

Clarice has just designed a questionnaire to measure stress in children. She wants to make sure that it truly measures stress and not something like anxiety, fear, or frustration. She is wanting to make sure her measure is

- a) valid.
- b) reliable.
- c) able to be replicated.
- d) rigorous.

ANS: a

Topic=Scientific Methodology: A Toolbox of Skills

Skill=Apply What You Know

Objective=LO 2.2a Explain the importance of openness and transparency in psychological research

Difficulty=Difficult

Consider This: Which technique for evaluating measures in experiments is being used in this example? LO 2.2a Explain the importance of openness and transparency in psychological research

EOM Q2.2.2

Sherri wants to design a self-report measure for her study of personality traits, but she knows she should be concerned that respondents might distort their answers, especially to paint themselves in a positive light.

This tendency is known as _____.

- a) a response set
- b) the halo effect
- c) a legitimacy set
- d) the mediator effect

ANS: a

Topic= Scientific Methodology: A Toolbox of Skills

Skill=Apply What You Know

Objective=LO 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys

Difficulty=Moderate

Consider This: On an anonymous survey, would you be completely frank in your evaluation of yourself? LO 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

EOM Q2.2.3

Carlotta wants to determine if achievement is associated with a child's birth order in their family. It would be best if Carlotta conducted a(n) _____ study.

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

ANS: a

Topic= Scientific Methodology: A Toolbox of Skills

Skill=Analyze It

Objective=LO 2.2c Describe the role of correlational designs and distinguish correlation from causation

Difficulty=Moderate

Consider This: Different research designs have associated strengths and weaknesses. Which kind of design would be most appropriate to the goals of association stated here? LO 2.2c Describe the role of correlational designs and distinguish correlation from causation

EOM Q2.2.4

The only research designs that allow us the possibility of drawing cause-and-effect inferences are

- a) experimental designs.
- b) correlational designs.
- c) survey methods.
- d) naturalistic designs.

ANS: a

Topic= Scientific Methodology: A Toolbox of Skills

Skill=Apply What You Know

Objective=LO 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls

Difficulty=Moderate

Consider This: This research approach is the "gold standard" for determining causality. LO 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls

EOM Q2.2.5

The two ingredients that make a research study an experiment are 1) random assignment of participants to conditions, and 2) _____.

- a) manipulation of an independent variable
- b) manipulation of a dependent variable
- c) external validity gained through real-world control
- d) high inter-rater reliability

ANS: a

Topic= Scientific Methodology: A Toolbox of Skills

Skill=Remember the Facts

Objective=LO 2.2c Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control these pitfalls

Difficulty=Easy

Consider This: Experimentation, by definition, requires these two features to be present at a minimum. LO 2.2c Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control these pitfalls

Quiz 2.3: Ethical Issues in Research Design

EOM Q2.3.1

The APA Ethical Principles for Human Research state: "A contact [person] who can answer questions about the research and the participant's rights should be provided." This statement is most relevant in which of the following aspects of ethical research?

- a) informed consent
- b) protection from harm and discomfort
- c) deception and debriefing
- d) expectation of privacy

ANS: a

Topic=Ethical Issues in Research Design

Skill=Understand the Concepts

Objective=LO 2.3a Explain the ethical obligations of researchers toward their research participants

Difficulty=Moderate

Consider This: Participants should be given enough information to make a reasonable decision regarding their participation in a research study. LO 2.3a Explain the ethical obligations of researchers toward their research participants

EOM Q2.3.2

The authors accept the philosophical belief that science is _____; that is, neither good nor bad in itself.

- a) value-neutral
- b) ethically static
- c) morally indefensible
- d) conscience-free

ANS: a

Topic=Ethical Issues in Research Design

Skill=Understand the Concepts

Objective=LO 2.3a Explain the ethical obligations of researchers toward their research participants

Difficulty=Moderate

Consider This: Scientific *research* is not considered to be this, as there are both ethical and unethical ways of searching for the truth. LO 2.3a Explain the ethical obligations of researchers toward their research participants

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

EOM Q2.3.3

What shameful experiment was conducted over the course of 40 years to determine what would happen if syphilis was left to run its course in unsuspecting “subjects” (at a time when a cure for the disease was already available)?

- a) the Tuskegee study
- b) the Syphilis study
- c) the Milgram experiment
- d) the Vivisection experiment

ANS: a

Topic=Ethical Issues in Research Design

Skill=Apply What You Know

Objective=LO 2.3a Explain the ethical obligations of researchers toward their research participants

Difficulty=Moderate

Consider This: The subjects did not know they were part of a research study, as the researchers had never informed them of that fact. LO 2.3a Explain the ethical obligations of researchers toward their research participants

EOM Q2.3.4

Research involving nonhuman animals can generate strong, often negative, feelings among people. This is especially so when the research involves _____ procedures that cause physical harm to the nonhuman animal research participants.

- a) invasive
- b) exploratory
- c) generative
- d) unplanned

ANS: a

Topic=Ethical Issues in Research Design

Skill=Understand the Concepts

Objective=LO 2.3b Describe both sides of the debate on the use of nonhuman animals as research subjects

Difficulty=Difficult

Consider This: Researchers must weigh carefully the potential scientific gains of their inquiries against the costs in death and suffering they produce. LO 2.3b Describe both sides of the debate on the use of nonhuman animals as research subjects

EOM Q2.3.5

Which of the following best summarizes the benefits of using nonhuman animals in research?

- a) Without nonhuman animal research, we’d know relatively little about the physiology of the brain.
- b) Rats experience depression the same way humans do.
- c) Very few nonhuman animals are used in medical and psychological research each year.
- d) Doing research on nonhuman animals is less complicated than doing research on humans.

ANS: a

Topic=Ethical Issues in Research Design

Skill=Remember the Facts

Objective=LO 2.3b Describe both sides of the debate on the use of nonhuman animals as research subjects

Difficulty=Moderate

Consider This: Nonhuman animal research has contributed direct benefits to humans. LO 2.3b Describe both sides of the debate on the use of nonhuman animals as research subjects

Quiz 2.4: Statistics: The Language of Psychological Research

EOM Q2.4.1

Which term indicates applying mathematics to describe and analyze data?

- a) statistics
- b) information
- c) research
- d) science

ANS: a

Topic=Statistics: The Language of Psychological Research

Skill=Remember the Facts

Objective=LO 2.4a Identify uses of various measures of central tendency and variability

Difficulty=Easy

Consider This: Psychologists use two different kinds: descriptive and inferential. LO 2.4a Identify uses of various measures of central tendency and variability

EOM Q2.4.2

The following scores are obtained when observing reaction time after participants consume alcohol. Data set: 2.4, 3.2, 1.8, 2.9, 10.9, and 3.1. What is the technical term for the 10.9 measure, which lies outside the range of the other scores?

- a) an outlier
- b) a variable
- c) the range
- d) a skewer

ANS: a

Topic=Statistics: The Language of Psychological Research

Skill=Apply What You Know

Objective=LO 2.4a Identify uses of various measures of central tendency and variability.

Difficulty=Moderate

Consider This: Imagine a situation where most people scored 53 on a test, but one person scored a 78 and another scored a 22. LO 2.4a Identify uses of various measures of central tendency and variability

EOM Q2.4.3

Questions such as, "What is the average level of extraversion in this sample?" call for the use of which kind of statistics?

- a) descriptive
- b) inferential
- c) influential
- d) deterministic

ANS: a

Topic=Statistics: The Language of Psychological Research

Skill=Remember the Facts

Objective=LO 2.4a Identify uses of various measures of central tendency and variability

Difficulty=Easy

Consider This: This term is used for techniques that summarize what is happening in a set of values.

LO 2.4a Identify uses of various measures of central tendency and variability

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

EOM Q2.4.4

Freda is reading a journal article in psychology, and sees that a statistically significant outcome would have occurred by chance alone only 5 out of 100 times. This statement would be summarized in the journal article as

- a) $p < 0.05$.
- b) $p = 5\%$.
- c) $p > 0.05$.
- d) $p \times 5 = 100$.

ANS: a

Topic=Statistics: The Language of Psychological Research

Skill=Remember the Facts

Objective=LO 2.4b Explain how inferential statistics can help us to determine whether we can generalize from our sample to the full population

Difficulty=Moderate

Consider This: If a result is likely to have occurred less than 5 times out of 100 by sheer chance alone, scientists usually agree that the result is statistically significant; that is, something noteworthy to be interpreted. LO 2.4b Explain how inferential statistics can help us to determine whether we can generalize from our sample to the full population

EOM Q2.4.5

Mark Twain referred to three kinds of untruths: "Lies, damned lies, and statistics," because

- a) statistics sometimes can be used to mislead people.
- b) inferential statistics are generally wrong.
- c) descriptive statistics are generally wrong.
- d) statisticians are generally unethical.

ANS: a

Topic=Statistics: The Language of Psychological Research

Skill=Analyze It

Objective=LO 2.4c Show how statistics can be misused for purposes of persuasion

Difficulty=Easy

Consider This: Understanding how basic statistical procedures work is the first step toward being able to counter the unscrupulous use of statistics in the service of advancing a particular point of view. LO 2.4c Show how statistics can be misused for purposes of persuasion

Quiz 2.5: Evaluating Psychological Research

EOM Q2.5.1

Dr. Ingo Larsen is testing the effectiveness of a new memory-enhancing study technique. He greets each participant at the door and escorts them into either the control group (that receives the old memory technique) or the experimental group (that receives the new memory technique). He then conducts the experiment and analyzes the results. This is all quite problematic, because of the potential presence of

- a) experimenter expectancy effects.
- b) placebo outcomes.
- c) rival hypotheses.
- d) sharpening and leveling.

ANS: a

Topic=Evaluating Psychological Research

Skill=Analyze It

Objective=LO 2.5a Identify flaws in research designs and how to correct them

Difficulty=Difficult

Consider This: To control for this effect and minimize confirmation bias, it might be better to keep Dr. Larsen blind to the group assignment when he collects data during the course of the study. LO 2.5a Identify flaws in research designs and how to correct them

EOM Q2.5.2

One primary purpose of sending research articles to peer reviewers prior to publication is to

- a) identify flaws in the research.
- b) give those with opposing views equal time for rebuttal.
- c) give everyone an equal chance to publish her or his research.
- d) maintain leadership among experts in the field.

ANS: a

Topic=Evaluating Psychological Research

Skill=Understand the Concepts

Objective=LO 2.5a Identify flaws in research designs and how to correct them

Difficulty=Moderate

Consider This: Outside reviewers screen the articles carefully for quality control. LO 2.5a Identify flaws in research designs and how to correct them

EOM Q2.5.3

One important aspect of a research study that peer reviewers consider is whether the study considers alternate explanations. This is called

- a) ruling out rival hypotheses.
- b) diminishing internal validity.
- c) generating counterfactuals.
- d) rendering external validity.

ANS: a

Topic=Evaluating Psychological Research

Skill=Understand the Concepts

Objective=LO 2.5a Identify flaws in research designs and how to correct them

Difficulty=Moderate

Consider This: Research should be designed in such a way as to keep most elements constant while varying only the key elements under study. LO 2.5a Identify flaws in research designs and how to correct them

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

EOM Q2.5.4

In the popular media (as opposed to scientific journals), research results can be presented in a misleading way because reporters have the tendency to exaggerate the gist or central message of the study. This is called

- a) sharpening.
- b) oversimplifying.
- c) leveling.
- d) dumbing down.

ANS: a

Topic=Evaluating Psychological Research

Skill=Remember the Facts

Objective=LO 2.5b Identify skills for evaluating psychological claims in the popular media

Difficulty=Easy

Consider This: Secondary sources in the news media need to engage in a certain amount of this when reporting studies, because they cannot possibly describe every detail that took place in a scientific investigation. LO 2.5b Identify skills for evaluating psychological claims in the popular media

EOM Q2.5.5

The media reports that new research shows cell phone usage is associated with tumor formation in the brain just above the ear. In the report, they describe the research findings and then publish interviews with three local cell phone distributors who voice concerns about how the study was conducted and who provided the primary funding for the study. This results in

- a) pseudosymmetry.
- b) balanced reporting.
- c) the placebo effect.
- d) leveling.

ANS: a

Topic=Evaluating Psychological Research

Skill=Apply What You Know

Objective=LO 2.5b Identify skills for evaluating psychological claims in the popular media

Difficulty=Difficult

Consider This: This is also known as the appearance of a scientific controversy where none exists. LO 2.5b Identify skills for evaluating psychological claims in the popular media

Chapter 2 Quiz: Research Methods

EOC Q2.1

Bruno is asked to estimate which California city occupies a greater area: San Francisco or San Jose. "San Francisco is a big city," he muses, "whereas San Jose is out in the suburbs. San Francisco must be bigger." In actuality, San Francisco occupies about 48 square miles, compared to San Jose's 180 square miles.

Bruno was misled because he relied on

- a) a heuristic.
- b) an algorithm.
- c) System 2 thinking.
- d) hegemony.

ANS: a

Topic=The Beauty and Necessity of Good Research Design

Skill=Apply What You Know

Objective=LO 2.1a Identify two modes of thinking and their application to scientific reasoning

Difficulty=Moderate

Consider This: Bruno made a quick judgment based on his intuitions about population and city size.

LO 2.1a Identify two modes of thinking and their application to scientific reasoning

EOC Q2.2

You are wanting to study how people respond to being frightened. You set up a scenario where people who are just turning the corner of the building are met with a realistic-looking snake toy. You record their behavior from the time they see the snake toy to when they finally calm down. This type of study is known as a(n)

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

ANS: a

Topic=Scientific Methodology: A Toolbox of Skills

Skill=Understand the Concepts

Objective=LO 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys

Difficulty=Moderate

Consider This: Some behaviors can only be observed in a real-world situation. LO 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

EOC Q2.3

Which term refers to the type of descriptive statistic that tells us where the scores tend to cluster in a set of measurements?

- a) central tendency
- b) variability
- c) standard deviation
- d) measure of range

ANS: a

Topic=Statistics: The Language of Psychological Research

Skill=Apply What You Know

Objective=LO 2.4a Identify uses of various measures of central tendency and variability

Difficulty=Moderate

Consider This: There are three measures of this: mean, median, and mode. LO 2.4a Identify uses of various measures of central tendency and variability

EOC Q2.4

When we perceive a reliable association between two events (although none exists), such as the presence of rainy weather and arthritis flare-ups, we are experiencing the phenomenon called

- a) illusory correlation.
- b) invalid assumption.
- c) ethical mirage.
- d) statistical anomaly.

ANS: a

Topic=Scientific Methodology: A Toolbox of Skills

Skill=Analyze It

Objective=LO 2.2c Describe the role of correlational designs and distinguish correlation from causation

Difficulty=Difficult

Consider This: For 20 years, Wade Boggs ate chicken before every game, believing this particular habit was correlated with successful performance at bat. 2.2c Describe the role of correlational designs and distinguish correlation from causation

EOC Q2.5

Prior to participating in a study, Danielle received a form that describes what she is expected to do or encounter during the study. Danielle is participating in

- a) informed consent.
- b) debriefing.
- c) scientific method.
- d) institutional review.

ANS: a

Topic=Ethical Issues in Research Design

Skill=Apply What You Know

Objective=LO 2.3a Explain the ethical obligations of researchers toward their research participants

Difficulty=Moderate

Consider This: During this process, participants can ask questions about the study and learn more about what will be involved. LO 2.3a Explain the ethical obligations of researchers toward their research participants

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

EOC Q2.6

To be sure that we are not fooled by popular media reports about psychology research, we should be on the lookout for

- a) sharpening and leveling.
- b) dumbing down.
- c) the placebo effect.
- d) deliberate deception.

ANS: a

Topic=Evaluating Psychological Research

Skill=Understand the Concepts

Objective=LO 2.5b Identify skills for evaluating psychological claims in the popular media

Difficulty=Moderate

Consider This: This often ends up bringing the most important facts of a study into clearer focus, at the expense of pertinent details or caveats in the study. LO 2.5b Identify skills for evaluating psychological claims in the popular media

EOC Q2.7

You want to design a study that will be high in internal validity and will allow you to infer causation. Which research design should you use?

- a) experimental design
- b) correlational design
- c) case studies
- d) naturalistic observation

ANS: a

Topic=Scientific Methodology: A Toolbox of Skills

Skill=Apply What You Know

Objective=LO 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls

Difficulty=Moderate

Consider This: Researchers manipulate variables to see whether these manipulations produce differences in participants' behavior. LO 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls

EOC Q2.8

A central issue in considering medical and psychological research using nonhuman animals is balancing the advances gained through such experimentation against

- a) the costs in death and suffering they produce for the test subjects.
- b) the backlash of animal rights activists.
- c) possibly negative publicity focused on the research center.
- d) the exorbitant financial costs of animal research.

ANS: a

Topic=Ethical Issues in Research Design

Skill=Analyze It

Objective=LO 2.3b Describe both sides of the debate on the use of nonhuman animals as research subjects

Difficulty=Difficult

Consider This: Animal researchers are called upon to strike a balance between two basic considerations. LO 2.3b Describe both sides of the debate on the use of nonhuman animals as research subjects

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

EOC Q2.9

The process of soliciting feedback from qualified experts in a research area prior to publishing the results of a research study is called

- a) peer review.
- b) professional critique.
- c) vetting for publication.
- d) editorial correction.

ANS: a

Topic=Evaluating Psychological

Skill=Remember the Facts

Objective=LO 2.5a Identify flaws in research designs and how to correct them

Difficulty=Easy

Consider This: Nearly all psychological journals send submitted articles to outside reviewers, who screen the articles carefully for quality control. LO 2.5a Identify flaws in research designs and how to correct them

EOC Q2.10

We say that a result has practical significance if it

- a) makes a difference in the real world.
- b) would occur by chance less than 5 times in 100.
- c) results from manipulating a single variable.
- d) is not statistically significant.

ANS: a

Topic=Statistics: The Language of Psychological Research

Skill=Remember the Facts

Objective=LO 2.4b Explain how inferential statistics can help us to determine whether we can generalize from our sample to the full population

Difficulty=Easy

Consider This: There are different senses in which a research outcome might be "significant." LO 2.4b Explain how inferential statistics can help us to determine whether we can generalize from our sample to the full population

EOC Q2.11

When a politician makes the statement that the average tax return will be \$5,000 for citizens of her state, we should be suspicious of her statistics. It would be more meaningful to report the _____ as a measure of central tendency.

- a) median or mode
- b) highest and lowest refunds
- c) refund of an individual "typical" taxpayer
- d) average of refunds in all similar states

ANS: a

Topic=Statistics: The Language of Psychological Research

Skill=Apply What You Know

Objective=LO 2.4c Show how statistics can be misused for purposes of persuasion

Difficulty=Difficult

Consider This: There are multiple measures of central tendency for a reason; they reveal different kinds of information and have associated strengths and weaknesses. LO 2.4c Show how statistics can be misused for purposes of persuasion

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

EOC Q2.12

Dr. Sardonicus is designing a case study in order to demonstrate that a particular psychological phenomenon actually happens. Case studies can be useful in providing this kind of demonstration, also known as

- a) existence proof.
- b) peer review.
- c) internal validity.
- d) external validity.

ANS: a

Topic=Scientific Methodology: A Toolbox of Skills

Skill=Apply What You Know

Objective=LO 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys

Difficulty=Moderate

Consider This: Before designing a fancy, complicated research study, a more basic question might be whether a phenomenon occurs at all. LO 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys

EOC Q2.13

Arno did a study to demonstrate the relationship between age and intellect. To best represent his data, Arno should use a

- a) scatterplot.
- b) truncated line graph.
- c) bar graph.
- d) distribution curve.

ANS: a

Topic= Scientific Methodology: A Toolbox of Skills

Skill=Analyze It

Objective=LO 2.2c Describe the role of correlational designs and distinguish correlation from causation

Consider This: The examples listed are all possible shapes that a set of measurements might take when graphed. LO 2.2c Describe the role of correlational designs and distinguish correlation from causation

EOC Q2.14

The APA Ethical Principles for Human Research indicate that psychologists must take reasonable steps to

- a) avoid harming participants.
- b) ensure accurate data collection.
- c) use human subjects instead of nonhuman animals whenever possible.
- d) use deceptive techniques.

ANS: a

Topic=Ethical Issues in Research Design

Skill=Remember the Facts

Objective=LO 2.3a Explain the ethical obligations of researchers toward their research participants

Difficulty=Easy

Consider This: Psychological researchers must carefully attend to several principles when designing and conducting research. LO 2.3a Explain the ethical obligations of researchers toward their research participants

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

EOC Q2.15

The story of how facilitated communication was debunked is a powerful illustration of the triumph of science over

- a) pseudoscience.
- b) autism.
- c) child abuse.
- d) affliction.

ANS: a

Topic=The Beauty and Necessity of Good Research Design

Skill=Understand the Concepts

Objective=LO 2.1a Identify two modes of thinking and their application to scientific reasoning

Difficulty=Moderate

Consider This: Properly designed scientific studies have been able to show when treatments work and when they do not. LO 2.1a Identify two modes of thinking and their application to scientific reasoning

EOC Q2.16

Dr. Rand conducts a study to determine the relationship between the hours of sleep a student gets the night before an exam and their actual performance on the exam. Dr. Rand graphs her data to make it easier to see the relationship between the two variables. She finds that the two variables are positively correlated. Her data is best represented by a graph with

- a) a line that slopes up from left to right.
- b) a line that slopes down from left to right.
- c) a line with no slope that runs parallel to the bottom axis of the graph.
- d) a line that runs perpendicular to the bottom axis of the graph.

ANS: a

Topic=Scientific Methodology: A Toolbox of Skills

Skill=Apply What You Know

Objective=LO 2.2c Describe the role of correlational designs and distinguish correlation from causation

Difficulty=Difficult

Consider This: Scatterplots can reveal patterns in the data, especially regarding how variables are related to one another. LO 2.2c Describe the role of correlational designs and distinguish correlation from causation

EOC Q2.17

When evaluating a story about psychology research, we should generally place more confidence in a reputable science journal than a popular magazine. Which phrase encapsulates that idea?

- a) Consider the source.
- b) There are two sides to every story.
- c) Every cloud has a silver lining.
- d) You get what you pay for.

ANS: a

Topic=Evaluating Psychological Research

Skill=Remember the Facts

Objective=LO 2.5b Identify skills for evaluating psychological claims in the popular media

Difficulty=Easy

Consider This: We should place more trust in findings from primary sources, such as original journal articles, than from secondary sources, such as newspapers, magazines, or websites. LO 2.5b Identify skills for evaluating psychological claims in the popular media

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

EOC Q2.18

Because carefully controlled studies generate more trustworthy results, the high internal validity of these studies can lead to

- a) high external validity.
- b) correlation of causation.
- c) further studies.
- d) lack of falsifiability.

ANS: a

Topic=Scientific Methodology: A Toolbox of Skills

Skill=Understand the Concepts

Objective=LO 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls

Difficulty=Moderate

Consider This: Recall the distinction between internal and external validity. LO 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls

EOC Q2.19

The two kinds of statistics used by psychologists are descriptive statistics and _____ statistics.

- a) inferential
- b) variable
- c) ethical
- d) distributed

ANS: a

Topic=Statistics: The Language of Psychological Research

Skill=Understand the Concepts

Objective=LO 2.4b Explain how inferential statistics can help us to determine whether we can generalize from our sample to the full population

Difficulty=Easy

Consider This: These two types serve different functions; together, they help researchers fully understand what is going on in a set of measurements. LO 2.4b Explain how inferential statistics can help us to determine whether we can generalize from our sample to the full population

EOC Q2.20

Which group at every major American research college and university reviews all research carefully to protect participants against abuses?

- a) institutional review board
- b) institutional research bureau
- c) investigative review bureau
- d) investigative research board

ANS: a

Topic=Ethical Issues in Research Design

Skill=Understand the Concepts

Objective=LO 2.3a Explain the ethical obligations of researchers toward their research participants

Difficulty=Moderate

Consider This: IRBs typically consist of faculty members drawn from various departments within a college or university, as well as one or more outside members, such as a person drawn from the nearby community. LO 2.3a Explain the ethical obligations of researchers toward their research participants

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

EOC Q2.21

The type of thinking that allows us to operate on "autopilot" and make snap decisions is called

- a) intuitive.
- b) analogical.
- c) analytical.
- d) System 2.

ANS: a

Topic=The Beauty and Necessity of Good Research Design

Skill=Remember the Facts

Objective=LO 2.1a Identify two modes of thinking and their application to scientific reasoning

Difficulty=Easy

Consider This: We engage in this type of thinking when we meet someone new and form an immediate first impression of him or her. LO 2.1a Identify two modes of thinking and their application to scientific reasoning

EOC Q2.22

Questionnaires fall into which category of measurement tools?

- a) self-report measures
- b) test-retest measures
- c) interrater reliability measures
- d) validity measures

ANS: a

Topic=Scientific Methodology: A Toolbox of Skills

Skill=Remember the Facts

Objective=LO 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys

Difficulty=Easy

Consider This: If we want to find out about someone's personality and attitudes, a good place to start is to ask them directly. LO 2.2b Describe the advantages and disadvantages of using naturalistic observation, case studies, self-report measures, and surveys

EOC Q2.23

Megan wanted to get a measure of the amount of variability in her set of data, so she subtracted the lowest score from the highest score. Megan computed the

- a) range.
- b) standard of deviation.
- c) inferential.
- d) integral.

ANS: a

Topic=Statistics: The Language of Psychological Research

Skill=Apply What You Know

Objective=LO 2.4a Identify uses of various measures of central tendency and variability

Difficulty=Moderate

Consider This: Although this is the easiest measure of variability to calculate, it can be deceptive. LO 2.4a Identify uses of various measures of central tendency and variability

Lilienfeld/Lynn/Namy, *Psychology: From Inquiry to Understanding*, 5e

EOC Q2.24

In a study to test the effects of a new memory technique, students are given one of two different memory techniques to use for their next exam. Their scores on the next exam are used to determine the effectiveness of the two techniques. In this study, what is the *dependent variable*?

- a) the students' scores on the next exam
- b) the first memory technique
- c) the two memory techniques
- d) the students' GPAs

ANS: a

Topic=Scientific Methodology: A Toolbox of Skills

Skill=Analyze It

Objective=LO 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls

Difficulty=Difficult

Consider This: Think about why the dependent variable is called by that name. LO 2.2d Identify the components of an experiment, the potential pitfalls that can lead to faulty conclusions, and how psychologists control for these pitfalls

EOC Q2.25

If subjects' scores on a self-esteem scale are consistent over time, the scale has high _____ reliability.

- a) test-retest
- b) interrater
- c) interlocutor
- d) Meehl-determinant

ANS: a

Topic=Scientific Methodology: A Toolbox of Skills

Skill=Understand the Concepts

Objective=LO 2.2a Explain the importance of replication and transparency in psychological research

Difficulty=Moderate

Consider This: The focus here is on stability over an extended period. LO 2.2a Explain the importance of replication and transparency in psychological research