

## Chapter 2 Psychology's Scientific Method

1. The first step of the scientific method in psychology involves

- A. observing some phenomenon in the world.
- B. formulating hypotheses and predictions.
- C. testing through empirical research.
- D. evaluating the theory based on the conclusions drawn.

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Outline the steps of the scientific method.

Topic: Scientific Method

Feedback: Psychology's Scientific Method

2. In the context of psychology's scientific method, a variable is anything that

- A. can change.
- B. increases experimenter bias.
- C. decreases research participant bias.
- D. remains constant.

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Outline the steps of the scientific method.

Topic: Variables

Feedback: Step 3. Testing Through Empirical Research

3. For a research project, Joaquin observes student behavior during a learning task and attempts to form a \_\_\_\_\_, which is a broad idea or set of closely related ideas that attempts to explain observations and to make predictions about future observations.

- A. Theory
- B. Variable
- C. Statistic
- D. Bias

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: Medium

Learning Objective: Outline the steps of the scientific method.

Topic: Theories

Feedback: Step 1. Observing Some Phenomenon

4. In the context of psychology's scientific method, theory is defined as

- A. anything that can change.
- B. the specific expectation for the outcome of a study.
- C. a set of closely related ideas that attempts to explain observations.
- D. the mathematical procedure used to interpret data.

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Outline the steps of the scientific method.

Topic: Theories

Feedback: Step 1. Observing Some Phenomenon

5. In the context of psychology's scientific method, which of the following is true of theories?

- A. Theories explain relations between variables on a conceptual level.
- B. Theories are educated guesses that derive logically from a hypothesis.
- C. Theories cannot explain the occurrences of phenomena.

D. Theories cannot be used to make predictions about future observations.

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Outline the steps of the scientific method.

Topic: Theories

Feedback: Step 1. Observing Some Phenomenon

6. Dr. Kate proposes that students find it difficult to return to their academic schedules after spring break. Specifically, she predicts that every year there will be more student absences on the Monday following spring break than on the Friday before spring break. The first statement describes the \_\_\_\_\_, while the second is the \_\_\_\_\_.

A. design of the study; research method

**B.** theory; hypothesis

C. hypothesis; operational definition

D. prediction; procedure

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Distinguish between theory and hypothesis.

Topic: Scientific Method

Feedback: Step 1. Observing Some Phenomenon

Feedback: Step 2. Formulating Hypotheses and Predictions

7. In the context of psychology's scientific method, a(n) \_\_\_\_\_ is an educated guess that derives logically from a theory.

A. operational definition

B. fact

**C.** hypothesis

D. variable

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Distinguish between theory and hypothesis.

Topic: Hypotheses

Feedback: Step 2. Formulating Hypotheses and Predictions

8. Allie has developed a theory concerning test grades of high school students. She believes that there is a strong causal relationship between students' levels of happiness and their grades in school. In this scenario, her expectation that happier students get better grades is a \_\_\_\_\_ derived from her theory.

A. variable

B. bias

C. fact

**D.** hypothesis

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APA Outcome: 1.3 Describe applications of psychology

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Distinguish between theory and hypothesis.

Topic: Hypotheses

Feedback: Step 2. Formulating Hypotheses and Predictions

9. Ciara believes that working women are happier than women who do not work. She predicts that women who work for at least 10 years are more likely to have good mental health after the age of 50 years than women who do not. She decides to test this prediction. In the context of psychology's scientific method, Ciara's prediction is the \_\_\_\_\_ for the study she is going to conduct.

A. variable

B. confound

C. placebo

**D.** hypothesis

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Outline the steps of the scientific method.

Topic: Hypotheses

#### Feedback: Step 2. Formulating Hypotheses and Predictions

10. In surveys conducted by Gerald, many adolescents report that they started smoking cigarettes because of peer pressure. While observing adolescent groups, however, Gerald rarely sees adolescents offering each other cigarettes or putting pressure on others to smoke. Gerald predicts that if he conducts further studies on this topic, he will be able to prove that peer pressure is not the primary reason that adolescents start smoking cigarettes. In the context of psychology's scientific method, Gerald is basing his further studies on

A. a demand characteristic.

**B. a hypothesis.**

C. confounds.

D. third variable problems.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Outline the steps of the scientific method.

Topic: Hypotheses

#### Feedback: Step 2. Formulating Hypotheses and Predictions

11. After careful observation, Dylan states a hypothesis that spending money on other people leads to greater happiness than spending money on oneself. In accordance with the scientific method, which of the following steps is Dylan most likely to take next?

A. He will choose a confederate who will determine the operational definition.

**B. He will examine the prediction through empirical research.**

C. He will use longitudinal design to increase research participant bias.

D. He will conduct a correlational research.

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APA Outcome: 1.3 Describe applications of psychology

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Outline the steps of the scientific method.

Topic: Theories

#### Feedback: Step 3. Testing Through Empirical Research

12. Which of the following methods is used to gain knowledge through the observation of events, the collection of data, and logical reasoning?

A. Coincidental method

**B. Empirical method**

C. Hypothetical method

D. Conjured method

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Outline the steps of the scientific method.

Topic: Scientific Method

#### Feedback: Step 3. Testing Through Empirical Research

13. In the context of psychology's scientific method, the objective description of how a variable is going to be measured and observed in a particular study is referred to as the

A. hypothesis.

B. theory.

C. logical conclusion.

**D. operational definition.**

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Feedback: Step 3. Testing Through Empirical Research

14. Ashton, a biology student, wants to study butterflies using the scientific method. Which of the following scenarios represents a step or steps in the scientific method?

- A. While watching the butterflies, Ashton notices a phenomenon in their feeding behavior.
- B. Ashton makes a logical educated guess to predict the butterflies' future behaviors.
- C. Ashton tests his prediction by recording objective information about the butterflies.
- D. All of these answers are correct.**

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APA Outcome: 2.2 Demonstrate psychology information literacy  
Accessibility: Keyboard Navigation  
Bloom's: Apply  
Difficulty: Medium  
Learning Objective: Outline the steps of the scientific method.  
Topic: Scientific Method

Feedback: Psychology's Scientific Method

15. Ryan wants to study the level of personal happiness among his students. He devises a self-report questionnaire that measures how highly a student scores his or her life's achievements. Ryan believes that these scores are a good measure of personal happiness. In the context of empirical research, the scores on the questionnaire are representative of the \_\_\_\_\_ of the study.

- A. independent variable
- B. hypothesis
- C. operational definition**
- D. theory

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APA Outcome: 2.2 Demonstrate psychology information literacy  
Accessibility: Keyboard Navigation  
Bloom's: Apply  
Difficulty: High  
Learning Objective: Outline the steps of the scientific method.  
Topic: Scientific Method

Feedback: Step 3. Testing Through Empirical Research

16. In which of the following cases is Dr. Williams establishing an operational definition?

- A. Dr. Williams states that his subjects' manual dexterity can be assessed by the number of assigned manual tasks they are able to complete.**
- B. Dr. Williams determines the efficiency of the newest jets found in the Air Force.
- C. Dr. Williams states that his students must recall their earliest childhood memories and use these to understand more about themselves.
- D. Dr. Williams has his subjects go online to look up examples of "jealousy."

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APA Outcome: 2.2 Demonstrate psychology information literacy  
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Bloom's: Apply  
Difficulty: High  
Learning Objective: Outline the steps of the scientific method.  
Topic: Scientific Method

Feedback: Step 3. Testing Through Empirical Research

17. Which of the following is the purpose of using an operational definition?

- A. Internal validity becomes unnecessary when a study has an established operational definition.
- B. Establishing an operational definition ensures that everyone agrees on what a variable means.**
- C. Experimenter bias is eliminated with the use of an operational definition.
- D. Research participant bias is increased when a study uses an operational definition.

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APA Outcome: 1.2 Develop a working knowledge of psychology's content domains  
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Bloom's: Understand  
Difficulty: Medium  
Learning Objective: Outline the steps of the scientific method.  
Topic: Hypotheses

Feedback: Step 3. Testing Through Empirical Research

18. Dr. Gordon conducts an experiment on one of her clients, Johnny, who displays symptoms of attention deficit hyperactivity disorder. She postulates that Johnny's hyperactivity will be measured by the number of times he moves about while in the middle of a conversation. In this scenario, Dr. Gordon's postulation is the

- A. confederate.
- B. independent variable.
- C. operational definition.
- D. placebo.

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APA Outcome: 1.3 Describe applications of psychology

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Outline the steps of the scientific method.

Topic: Scientific Method

Feedback: Step 3. Testing Through Empirical Research

19. A key aspect of the process of testing hypothesis is

- A. confound analysis.
- B. conjecture.
- C. data analysis.
- D. personal opinion.

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Outline the steps of the scientific method.

Topic: Hypotheses

Feedback: Step 3. Testing Through Empirical Research

20. In the context of evaluating theories in psychology, \_\_\_\_\_ replication means doing a study precisely as it was conducted in its original form.

- A. theoretical
- B. abstract
- C. conceptual
- D. direct

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Outline the steps of the scientific method.

Topic: Theories

Feedback: Step 5. Evaluating the Theory

21. In the context of evaluating theories in psychology, \_\_\_\_\_ replication means doing a study with different methods or different types of samples.

- A. concrete
- B. hypothetical
- C. conceptual
- D. direct

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Outline the steps of the scientific method.

Topic: Theories

Feedback: Step 5. Evaluating the Theory

22. \_\_\_\_\_ is a statistical procedure that summarizes a large body of evidence from the research literature on a particular topic, allowing the researcher to assess the strength of the relationship between the variables.

- A. Meta-analysis
- B. Replication
- C. Substantiation
- D. Verification

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Outline the steps of the scientific method.

Topic: Theories

Feedback: Step 5. Evaluating the Theory

23. Bradley conducts research to validate his hypothesis that increased job satisfaction leads to greater organizational commitment among employees. He collates the existing data from all of the studies that he can locate on the topic. By looking at the data, he establishes that his hypothesis has been consistently proven correct across the studies. In this scenario, the method of study used by Bradley is

- A. direct replication.
- B. correlational research.
- C. meta-analysis.**
- D. experimental design.

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Outline the steps of the scientific method.

Topic: Hypotheses

Feedback: Step 5. Evaluating the Theory

24. Meta-analytic results in psychological research are more powerful than the results of a single study because the meta-analytic results

- A. combine many findings in the literature.**
- B. encourage experimenter bias.
- C. refrain from obtaining informed consent.
- D. use confounders to determine the independent variable.

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APA Outcome: 1.2 Develop a working knowledge of psychology's content domains

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Outline the steps of the scientific method.

Topic: Theories

Feedback: Step 5. Evaluating the Theory

25. \_\_\_\_\_ is a type of psychological research that uses surveys, case studies, and interviews to find out the basic dimensions of some variable.

- A. Experimental research
- B. Descriptive research**
- C. Correlational research
- D. Developmental research

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Identify and discuss the types of research that are used in psychology.

Topic: Descriptive Research

Feedback: Descriptive Research

26. In the context of psychological research methods, a \_\_\_\_\_ presents a standard set of questions, or items, to obtain people's self-reported attitudes or beliefs about a particular topic.

- A. variable
- B. placebo
- C. hypothesis
- D. survey**

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Identify and discuss the types of research that are used in psychology.

Topic: Survey Research

Feedback: Descriptive Research

27. In the context of psychological research methods, which of the following scenarios is an example of the survey method?

- A. Dr. Adele observes children as they learn to read.
- B. Dr. Gomes studies his patients while they undergo psychological counseling.
- C. Dr. Trooper collects children's school grades and test scores.
- D. Dr. Frank asks people how many hours of television they watch per week.

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APA Outcome: 2.2 Demonstrate psychology information literacy

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Bloom's: Apply

Difficulty: Medium

Learning Objective: Identify and discuss the types of research that are used in psychology.

Topic: Survey Research

Feedback: Descriptive Research

28. Mila, a school principal, wants to know her students' opinions about the food served in the school's cafeteria. To obtain her students' opinions, she devises a set of questions that she asks all her students to answer. In this case, Mila is using a \_\_\_\_\_ to obtain the opinions of her students.

- A. longitudinal experiment
- B. double-blind experiment
- C. survey
- D. case study

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Identify and discuss the types of research that are used in psychology.

Topic: Survey Research

Feedback: Descriptive Research

29. Which of the following statements is true of surveys?

- A. They are ineffective when used in correlational research.
- B. They are effective when used to study variables that are unconscious, such as a psychodynamic drive.
- C. They are useful when information from many people is required.
- D. They are not useful when what people think about themselves needs to be measured.

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APA Outcome: 1.2 Develop a working knowledge of psychology's content domains

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Identify and discuss the types of research that are used in psychology.

Topic: Survey Research

Feedback: Descriptive Research

30. A \_\_\_\_\_ is an in-depth look at a single individual.

- A. case study
- B. survey
- C. correlational study
- D. meta-analysis

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Identify and discuss the types of research that are used in psychology.

Topic: Case Studies

Feedback: Descriptive Research

31. In the context of descriptive research methods in psychology, \_\_\_\_\_ are performed mainly by clinical psychologists when, for either practical or ethical reasons, the unique aspects of an individual's life cannot be duplicated and tested with other individuals.

- A. case studies
- B. surveys
- C. correlational studies

## D. experiments

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Identify and discuss the types of research that are used in psychology.

Topic: Case Studies

### Feedback: Descriptive Research

32. Which of the following statements is true about using a case study as a method of descriptive research in psychology?

- A. A single case study's results are generalizable to the entire population.
- B. A case study's subject is unique, with a personal history that no one else shares.**
- C. A case study is most valuable as the last step of the scientific method.
- D. A case study cannot include thorough explorations of particular families or social groups.

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APA Outcome: 2.2 Demonstrate psychology information literacy

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Bloom's: Understand

Difficulty: Medium

Learning Objective: Identify and discuss the types of research that are used in psychology.

Topic: Case Studies

### Feedback: Descriptive Research

33. Dr. Okawa is interested in studying the effect of neurological trauma on short-term memory. First, he collects detailed information from a small number of individuals who have experienced brain damage. Then, using information provided by medical records, interviews, and observations, Dr. Okawa attempts to create an in-depth portrait of each individual. What type of research method was used in this study?

- A. Case study**
- B. Naturalistic observation
- C. Experimental method
- D. Surveys

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Identify and discuss the types of research that are used in psychology.

Topic: Case Studies

### Feedback: Descriptive Research

34. Derek, an Internet activist, committed suicide. Investigators explored Derek's past interactions on Wordbook, a famous social networking site, to discover any information that might reveal the reasons behind his suicide. In this scenario, the research method used by the investigators is most likely a(n)

- A. case study.**
- B. interview.
- C. survey.
- D. experiment.

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Identify and discuss the types of research that are used in psychology.

Topic: Case Studies

### Feedback: Descriptive Research

35. Professor Milton wants to examine the connection between brain damage and intelligence levels in adults. She wants to know whether brain damage has any connection to intelligence and, if so, what the extent of this connection is likely to be. Which of the following psychological research methods is likely to be most suitable to

Professor Milton's needs?

- A. case study
- B. survey
- C. correlational research**
- D. experimental research



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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Describe how correlational research determines the relationship between two sets of variables.

Topic: Correlational Research

Feedback: Correlational Research

36. Aaron wants to study the association between sleep deprivation and the number of hours spent on computer every day. He is not keen to establish causation, but would like to determine whether and how the increase or decrease in one variable is associated with the increase or decrease in the other variable. Which of the following research methods is likely to be most effective for Aaron's study?

A. survey

**B. correlational research**

C. experimental research

D. case study

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Describe how correlational research determines the relationship between two sets of variables.

Topic: Correlational Research

Feedback: Correlational Research

37. In psychological research, a correlational study is used to determine

A. cause and effect between variables.

**B. the link between variables.**

C. the nature of dependent and independent variables.

D. a measure of central tendency.

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Describe how correlational research determines the relationship between two sets of variables.

Topic: Correlational Research

Feedback: Correlational Research

38. When psychological researchers use the correlational method to study variables, the degree of relation between two variables is expressed as a numerical value known as

A. correlative conjunction.

B. error variance.

**C. correlational coefficient.**

D. correlative code.

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Describe how correlational research determines the relationship between two sets of variables.

Topic: Correlational Research

Feedback: Correlational Research

39. Jacob studies the link between listening to music and happiness. He finds that people who listen to music report that they are happier than people who do not listen to music. Which of the following is most likely to be the correlation coefficient between happiness and listening to music?

A. 0.00

B. 0.27

C. 1.00

**D. -0.27**

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Describe how correlational research determines the relationship between two sets of variables.

Feedback: Correlational Research

40. A psychological study indicates a strong positive correlation between two variables. This means that
- A. as one variable increases, the other decreases.
  - B. the correlation coefficient is 0.00.
  - C. one variable causes the other variable to occur.
  - D. as one variable increases, the other also increases.**

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: Medium

Learning Objective: Describe how correlational research determines the relationship between two sets of variables.

Topic: Correlational Research

Feedback: Correlational Research

41. Chris makes an observation that the longer a classroom lecture, the lower the attentiveness of students in the class. In the context of correlational research, the length of the lecture and level of attentiveness are said to have a
- A. positive correlation.
  - B. negative correlation.**
  - C. lack of correlation.
  - D. cause and effect relation.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: Medium

Learning Objective: Describe how correlational research determines the relationship between two sets of variables.

Topic: Correlational Research

Feedback: Correlational Research

42. Dr. Klaus conducted a research in psychology that established that the number of hours of study before a test is directly proportional to the performance in the test. In the context of correlational research, it can be said that \_\_\_\_\_ exists between the two variables.
- A. positive correlation**
  - B. negative correlation
  - C. no correlation
  - D. cause and effect relation

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: Medium

Learning Objective: Describe how correlational research determines the relationship between two sets of variables.

Topic: Correlational Research

Feedback: Correlational Research

43. Jessica investigates the relationship between caffeine intake and performance on a class test for high school students. Before her sample of students takes an exam, she notes the number of cups of coffee they consumed two hours before the test. She obtains their scores after the test is over. She then calculates the correlation coefficient between the two variables and finds it to be +0.82. Which of the following conclusions should Jessica draw from this value?
- A. Higher caffeine consumption is related to higher exam scores.**
  - B. Eighty-two percent of the students consumed caffeine prior to the exam.
  - C. Caffeine consumption causes higher scores.
  - D. Caffeine consumption has no association with performance on a test.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Describe how correlational research determines the relationship between two sets of variables.

Topic: Correlational Research

Feedback: Correlational Research

44. What does the magnitude of a correlation coefficient indicate about the variables in a correlational study?

- A. size of the variables
- B. strength of the relationship between the variables**
- C. number of data points
- D. direction of the relationship between the variables

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Describe how correlational research determines the relationship between two sets of variables.

Topic: Correlational Research

Feedback: Correlational Research

45. In the context of a correlational study, what does the positive or negative sign of a correlation coefficient indicate?

- A. cause of the relationship
- B. strength of the relationship
- C. number of data points
- D. direction of the relationship**

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Describe how correlational research determines the relationship between two sets of variables.

Topic: Correlational Research

Feedback: Correlational Research

46. Which of the following correlation coefficients is indicative of the strongest relationship between two variables?

- A. +0.65
- B. 0.00
- C. -0.87**
- D. -0.24

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Describe how correlational research determines the relationship between two sets of variables.

Topic: Correlational Research

Feedback: Correlational Research

47. Bill can predict participants' scores on a particular math test with perfect accuracy by knowing their scores on a specific aptitude test. Higher scores on the math test are closely associated with higher scores on the aptitude test. Which of the following correlation coefficients most likely expresses an accurate relationship between the two tests?

- A. -0.99
- B. +0.20
- C. -0.78
- D. +1.00**

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Describe how correlational research determines the relationship between two sets of variables.

Topic: Correlational Research

Feedback: Correlational Research

48. Professor Jacobs believes that sleep deprivation is related to conflicts between roommates. He collects data on the number of hours of sleep and the number of conflicts for a group of college students over the course of a month. He obtains a correlation coefficient of -0.75. In the context of correlational research, which of the following is the most likely conclusion from the results of his study?

- A. Seventy-five percent of the conflicts investigated are not related to sleep deprivation.
- B. Sleep deprivation causes fewer conflicts.
- C. Sleeping too little is associated with more conflicts.**
- D. Sleep and conflict are not related.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Describe how correlational research determines the relationship between two sets of variables.

Topic: Correlational Research

Feedback: Correlational Research

49. In the context of correlational research, if there is no relationship between two variables, what is the correlation coefficient?

A. +1.00

**B. 0.00**

C. -0.87

D. -0.99

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Describe how correlational research determines the relationship between two sets of variables.

Topic: Correlational Research

Feedback: Correlational Research

50. Joshua designs a research study to investigate the relationship between two variables: the size of a person's head and IQ level. He measures each variable without manipulating either of the variables and finds that IQ is higher for subjects with bigger heads. In the context of correlational research, what can Joshua conclude?

A. A large head size causes high IQ.

B. Head size and IQ are negatively correlated.

C. A high IQ causes a large head size.

**D. IQ and head size are positively correlated.**

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Describe how correlational research determines the relationship between two sets of variables.

Topic: Correlational Research

Feedback: Correlational Research

51. Professor Jordan has suggested to his students that a strong relationship exists between the number of hours they spend studying and their grade on the final exam. He would like his students to improve their test scores by increasing the time they spend studying. The professor is describing a

A. mean score.

B. negative correlation.

**C. positive correlation.**

D. standard deviation.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: Medium

Learning Objective: Describe how correlational research determines the relationship between two sets of variables.

Topic: Correlational Research

Feedback: Correlational Research

52. Sandra says that whenever she drinks coffee in the evenings it interferes with her ability to fall asleep. The more coffee she drinks before sleeping, the less sleep she gets. In the context of correlational research, Sandra is describing a \_\_\_\_\_ between caffeine intake and sleep.

**A. negative correlation**

B. positive correlation

C. causal relationship

D. lack of relationship

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Describe how correlational research determines the relationship between two sets of variables.

Feedback: Correlational Research

53. Professor Rodman, a social psychologist, studied the relationship between the severity of injuries in automobile accidents and the use of seat belts. He obtained a correlation coefficient of  $-0.72$ . In the context of correlational research, which of the following conclusions will the professor most likely arrive at?

- A. Wearing seat belts causes injuries in 72 percent of all accidents.
- B. People who wear seat belts sustain less serious injuries in an accident.**
- C. People who wear seat belts sustain more injuries in an accident.
- D. Wearing a seatbelt is not predictive of the type of injury one receives in an accident.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Describe how correlational research determines the relationship between two sets of variables.

Topic: Correlational Research

Feedback: Correlational Research

54. In correlational research, the “third variable problem” refers to a circumstance in which

- A. scatter plots for positive, negative, and zero correlations are the same.
- B. correlation between variables equals causation.
- C. a variable that has not been measured accounts for the relationship between two other variables.**
- D. experimenter bias increases the effects of research participant bias.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Describe how correlational research determines the relationship between two sets of variables.

Topic: Correlational Research

Feedback: Correlational Research

55. A \_\_\_\_\_ design is a type of correlational study in which variables are measured at a single point in time and then observations from this single measurement are compared.

- A. cross-sectional**
- B. longitudinal
- C. latitudinal
- D. short-term

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Describe how correlational research determines the relationship between two sets of variables.

Topic: Correlational Research

Feedback: Correlational Research

56. Which of the following is a potential problem of using correlational studies in psychological research?

- A. They do not enable researchers to establish a causal connection between variables.**
- B. They do not allow researchers to use just one variable to predict the movement of the other variable.
- C. They cannot be used in situations where the issue of ethics is important.
- D. They can be used to study the relationship between only two variables.

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Describe how correlational research determines the relationship between two sets of variables.

Topic: Correlational Research

Feedback: Correlational Research

57. Which of the following statements is true of the experience sampling method (ESM)?

- A. It is used to determine the variables in a random assignment project.

- B. It is used to conduct experimental research.
- C.** It is used to assess people in their natural settings.
- D. It is used to conduct descriptive research.

Page: 35–36

APA Outcome: 1.2 Develop a working knowledge of psychology's content domains

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Describe how correlational research determines the relationship between two sets of variables.

Topic: Correlational Research

Feedback: Correlational Research

58. Which of the following statements is true of the event-contingent responding method?
- A.** It asks participants to complete a report each time they engage in a particular behavior.
  - B. It is designed to predict the impact of natural calamities.
  - C. It is a method used to track brain wave abnormalities.
  - D. It is a common method used in descriptive research.

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APA Outcome: 1.2 Develop a working knowledge of psychology's content domains

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Describe how correlational research determines the relationship between two sets of variables.

Topic: Correlational Research

Feedback: Correlational Research

59. A \_\_\_\_\_ design is a special kind of systematic observation, used by correlational researchers, that involves obtaining measures of the variables of interest in multiple waves over time.
- A. cross-sectional
  - B.** longitudinal
  - C. latitudinal
  - D. short-term

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Identify and discuss the types of research that are used in psychology.

Topic: Longitudinal Research

Feedback: Correlational Research

60. Longitudinal designs differ from cross-sectional designs in that cross-sectional designs
- A. measure the variables in multiple waves over time.
  - B.** measure the variables only once.
  - C. are primarily used in experimental research.
  - D. are used to study brain wave abnormalities.

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APA Outcome: 1.2 Develop a working knowledge of psychology's content domains

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Identify and discuss the types of research that are used in psychology.

Topic: Longitudinal Research

Feedback: Correlational Research

61. Longitudinal research can suggest potential causal relationships because
- A. it applies the same techniques used by cross-sectional designs.
  - B.** the variables are measured only once during the course of the study.
  - C. it is primarily used in experimental and descriptive research.
  - D. if one variable is thought to cause changes in another, it should at least come before that variable in time.

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APA Outcome: 1.2 Develop a working knowledge of psychology's content domains

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Identify and discuss the types of research that are used in psychology.

Feedback: Correlational Research

62. Professor Wong measured the intelligence and temperament of a group of preschoolers. He plans to follow the same group of participants over time and collect similar data when the children are in 3rd grade, 6th grade, and 9th grade. Which type of research design does this scenario exemplify?

- A. sampling design
- B. experimental design
- C. longitudinal design**
- D. double-blind experiment

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Longitudinal Research

Feedback: Correlational Research

63. In the context of psychological research methods, \_\_\_\_\_ research is conducted to determine whether a causal relationship exists between two variables.

- A. descriptive
- B. correlational
- C. experimental**
- D. observational

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Experimental Research

Feedback: Experimental Research

64. In the context of psychological research methods, a(n) \_\_\_\_\_ is a carefully regulated procedure in which the researcher manipulates one or more variables that are believed to influence some other variable.

- A. experiment**
- B. correlational study
- C. meta-analysis
- D. survey

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Experimental Research

Feedback: Experimental Research

65. When conducting an experiment on time management, Jamie assigns everyone who arrives before noon to the experimental group and everyone who arrives after 12 noon to the control group. In the context of experimental research methods, what is wrong with Jamie's experiment?

- A. The experiment is not ethical.
- B. Jamie has not used true random assignment.**
- C. Jamie has introduced a confederate into the experiment.
- D. The experiment is deceptive.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Experimental Research

Feedback: Experimental Research

66. Dr. Gillespie conducts an experiment on childhood aggression. She has two groups in her experiment. She places participants into each group by flipping a coin. Heads places them in group A; tails places them in group

B. In this experiment, Dr. Gillespie has satisfied the requirement of

- A. experimental control.
- B. placebo control.
- C. blind experimentation.
- D. random assignment.**

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: Medium

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Experimental Research

Feedback: Experimental Research

67. Researchers' assignment of participants to groups by chance in order to reduce the likelihood that an experiment's results will be due to preexisting differences between groups is known as \_\_\_\_\_ assignment.

- A. correlative
- B. meta-analytical
- C. random**
- D. replicative

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Experimental Research

Feedback: Experimental Research

68. In the context of experimental research, random assignment of participants is important in order to ensure that

- A. independent variables are not restricted.
- B. groups have equal and balanced composition.**
- C. genders and ages are viewed independently.
- D. all participants that have specific characteristics are viewed in a single group.

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: High

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Experimental Research

Feedback: Experimental Research

69. In the context of experimental research, the logic of random assignment is that

- A. if participants in an experiment are assigned to each group by stratification, the actual differences between the groups will sustain over the long run.
- B. if participants in an experiment are assigned to each group only by chance, the actual similarities between the groups will sustain over the long run.
- C. if participants in an experiment are assigned to each group by stratification, the potential differences between the groups will cancel out over the long run.
- D. if participants in an experiment are assigned to each group only by chance, the potential differences between the groups will cancel out over the long run.**

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: High

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Experimental Research

Feedback: Experimental Research

70. One way to improve effectiveness of random assignment is to

- A. start with groups that have known preexisting differences.



- B.** start with a relatively large pool of people.
- C. ensure that all participants of an experiment are similar in all respects.
- D. ensure that it is used primarily for descriptive research.

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APA Outcome: 1.2 Develop a working knowledge of psychology's content domains

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Experimental Research

Feedback: Experimental Research

71. If Professor Jung wants to be able to draw cause and effect conclusions from her research, which of the following is the most crucial aspect of her experimental design?

- A. naturalistic observation
- B.** random assignment
- C. correlational research
- D. cross-sectional design

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: Medium

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Experimental Research

Feedback: Experimental Research

72. In an experimental study, a(n) \_\_\_\_\_ is a manipulated experimental factor that the experimenter changes to see what its effects are.

- A. third variable
- B. correlation coefficient
- C. dependent variable
- D.** independent variable

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Variables

Feedback: Experimental Research

73. Participants in an experimental research study listen to a lecture either in a lecture hall filled with natural light or in a lecture hall with no windows and artificial light. Before leaving the lecture halls, the participants fill out a mood survey. What is the independent variable in this study?

- A. the participants' responses to the survey questions
- B. the number of participants in the experiment
- C.** the type of light in the rooms
- D. the mood survey

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: Medium

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Variables

Feedback: Experimental Research

74. David Harper, the marketing manager of a large cosmetic company, observes that when the company decreases the price of its premium deodorant brand, there is an increase in the level of sales of the brand. If the company increases the price of its premium brand, there is a decrease in the level of sales of the brand. In the context of experimental research studies, the changes in price represent the

- A.** independent variable.
- B. dependent variable.
- C. placebo.
- D. confederate.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Variables

Feedback: Experimental Research

75. Professor Stenson is examining the effects of color on patients' anxiety levels. She randomly assigns patients to either a room painted white or a room painted black, and then she records their blood pressure. In this case, the independent variable is the

- A. blood pressure.
- B. anxiety level.
- C. room color.**
- D. building type.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Variables

Feedback: Experimental Research

76. Albert, a student researcher, varies the amount of food given to rats in an experiment to measure the effect on their learning behavior. In Albert's study, the amount of food given is the \_\_\_\_\_ variable.

- A. dependent
- B. experimental
- C. independent**
- D. third problem

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: Medium

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Variables

Feedback: Experimental Research

77. In an experimental study, a properly designed hypothesis will test a theory by predicting the

- A. random assignment of the experimental and control groups.
- B. changes in the dependent variable in response to changes in the independent variable.**
- C. amount of social context that will be manipulated by the confederate.
- D. participant error and its effect upon the results of the experiment.

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: High

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Experimental Research

Feedback: Experimental Research

78. Dr. Kingston, a psychologist, is examining how a student's reading speed is differently affected by two variables: being tutored by a teacher's assistant and being tutored by a computer-based reading program. In this experiment, which of the following is the dependent variable?

- A. the student's reading speed**
- B. the teacher's assistant
- C. the computer-based reading program
- D. the grade that the student belongs to

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Variables

Feedback: Experimental Research

79. A history class of 50 students has agreed to be the subject of a research study. Half of the class has been asked to study for the next history test while listening to classical music. The remaining half has been asked to study in a completely silent environment. The test scores of the two groups will be compared at the end of the experiment. In this experiment, which of the following is the dependent variable?
- A. the classical music for the first half of the class
  - B. the silent environment for the second half of the class
  - C. the reading speed of both groups during the experiment
  - D. the test scores of both groups at the end of the experiment**

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Variables

Feedback: Experimental Research

80. A researcher predicted that talking to plants enhances their growth. She gave 24 plants the same amount of water and sunlight. She talked to 12 of the 24 plants daily for 6 weeks and then measured their growth. In this experiment, which of the following is the dependent variable?
- A. food, water, and sunlight
  - B. the plants
  - C. talking to the plants
  - D. growth of the plants**

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Variables

Feedback: Experimental Research

81. A researcher tells a group of experimental subjects that they are going to receive “painful” electrical shocks as part of the experiment. He tells another group that they will receive “mild” electric shocks. He asks participants in both groups whether they prefer to wait alone or with others while he sets up the machinery that will deliver the shocks. In this experiment, which of the following is the dependent variable?
- A. the use of the term “painful”
  - B. the use of the term “mild”
  - C. the participants’ choice to wait alone or with others**
  - D. the machinery that delivers the shocks to the participants

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Variables

Feedback: Experimental Research

82. A(n) \_\_\_\_\_ is a person who is given a role to play in an experimental study so that the social context can be manipulated.
- A. confederate**
  - B. experimenter
  - C. placebo
  - D. confounder

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Experimental Research

Feedback: Experimental Research

83. Dr. Smith conducts an experiment on motivation. His experimental group is administered the independent variable. His control group is not. Dr. Smith hires Jack to act as a research subject who has little motivation despite the encouragement provided to him during the experiment. Dr. Smith

wants to see how Jack's behavior affects the motivation of the actual research subjects in the experimental group. In this experiment, Jack is serving as

- A. the dependent variable.
- B. a confederate.**
- C. an observer.
- D. the independent variable.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Experimental Research

Feedback: Experimental Research

84. Dr. Stanley predicts that interviewers who smile at their interviewees are more effective at eliciting honest responses than interviewers who do not. To study this, he asks Stacy to smile at the experimental group of interviewees and not smile at the control group of interviewees. In this study, Stacy is the

- A. confounder.
- B. variable.
- C. experimenter.
- D. confederate.**

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Experimental Research

Feedback: Experimental Research

85. In an experimental research study, which of the following groups is an experimental group?

- A. the group that is subjected to the change that the independent variable represents**
- B. the group that is not randomly assigned
- C. the group that is not subjected to the manipulated independent variable
- D. the group that is expected to have no response to the independent variable

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Experimental Research

Feedback: Experimental Research

86. In an experimental research study, the control group is the

- A. group that is exposed to the change that the independent variable represents.
- B. group that has the most significant response to the independent variable.
- C. group that is not subjected to the manipulated independent variable.**
- D. group that has the least significant response to the dependent variable.

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Experimental Research

Feedback: Experimental Research

87. A(n) \_\_\_\_\_ consists of participants in a study who are exposed to the change that the independent variable represents.

- A. experimental group**
- B. control group
- C. independent group
- D. confederate group

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Experimental Research

Feedback: Experimental Research

88. The \_\_\_\_\_ consists of participants in an experiment who are as much like the experimental group as possible and who are treated in every way like the experimental group except for a manipulated factor, the independent variable.

- A. confederate group
- B. confound group
- C. control group**
- D. double-blind group

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Experimental Research

Feedback: Experimental Research

89. Noelle, a psychologist, conducts a study to establish whether caffeine increases the ability to run. She has two groups of participants run on a treadmill for 15 minutes. One group drinks regular coffee before running, while the other group drinks decaffeinated coffee before running. The group that drinks decaffeinated coffee is the

- A. confederate group.
- B. control group.**
- C. experimental group.
- D. confound group.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Experimental Research

Feedback: Experimental Research

90. An experimenter studies the relationship between caffeine and reaction time. She designs her experiment with four groups. Group 1 receives 100 mg of caffeine each in their cups of coffee, group 2 receives 200 mg of caffeine each in their cups of coffee, group 3 receives 300 mg of caffeine each in their cups of coffee, and group 4 receives no coffee. Twenty minutes later, participants from all the groups are given a reaction-time test.

In this experiment, which group is the control group?

- A. group 4**
- B. group 3
- C. group 2
- D. group 1

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Experimental Research

Feedback: Experimental Research

91. In a study to determine whether viewing pictures of poverty-stricken children increases the tendency for people to donate money to charity, the experimental group sees pictures of poor children before being asked to donate to charity. The control groups sees pictures of random landscapes. In this study, the operational definition of the dependent variable is the

- A. choice of landscape pictures.
- B. amount that the experimental group chooses to donate.**
- C. gender of the children in the pictures shown.
- D. gender ratio in the experimental and control groups.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Experimental Research

Feedback: Experimental Research

92. Leslie hypothesizes that teenagers who read magazines develop low self-esteem because of the unrealistic expectations set by the actors and models in the magazines. To study this, she designs a questionnaire to assess confidence levels. Two groups take this questionnaire—one that reads a magazine before taking the questionnaire and one that does not. The group that reads the magazine is the

- A. confederate group.
- B. control group.
- C. experimental group.
- D. confound group.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Experimental Research

Feedback: Experimental Research

93. Which of the following statements is true of quasi-experimental designs?

- A. They are primarily used in correlational research.
- B. They allow for strong causal conclusions.
- C. They do not randomly assign participants to conditions.
- D. They are either impossible to conduct or unethical.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Experimental Research

Feedback: Experimental Research

94. Which of the following is a caution about experimental research?

- A. Correlation between variables implies causation.
- B. Quasi-experimental designs allow for strong causal conclusions.
- C. A reliable finding may not be valid.
- D. The use of confederates most often decreases experimenter bias.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Experimental Research

Feedback: Experimental Research

95. In an experimental study, external validity refers to the

- A. extent to which the results of a study can improve human life.
- B. fact that the study was subjected to some form of experimenter bias.
- C. fact that the finding of the study is replicated each time the experiment is conducted.
- D. extent to which the experimental design reflects the real-world issues it explores.

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Validity

Feedback: Experimental Research

96. In the context of experimental research, internal validity refers to the
- A. extent to which the experimental design reflects the real-world issues it explores.
  - B.** extent to which changes in the dependent variable are genuinely due to the manipulation of the independent variable.
  - C. degree to which the results of the experiment are generalizable to the larger population.
  - D. methodology used to carry out the random assignment of samples.

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Understand how experimental research can establish cause and effect relationships.

Topic: Validity

Feedback: Experimental Research

97. The influence of a researcher's expectations on the outcome of a research study is known as \_\_\_\_\_ bias.
- A.** experimenter
  - B. control
  - C. participant
  - D. third variable

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Identify possible sources of experimental bias in research.

Topic: Experimental Research

Feedback: Experimental Research

98. Dale, a researcher, conducts a study to determine the effects of color blue on mood. During the study, he is friendlier toward the female participants than he is toward the male participants, which makes the women feel more relaxed during the study. He concludes that blue color is more likely to have a relaxing effect on women than on men. Dale's study is vulnerable to
- A. confederate bias.
  - B. double-blind bias.
  - C.** experimenter bias.
  - D. research participant bias.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Identify possible sources of experimental bias in research.

Topic: Experimental Research

Feedback: Experimental Research

99. \_\_\_\_\_ characteristics are any aspects of an experimental research study that communicate to participants how the experimenter wants them to behave.
- A. Confound
  - B. Meta-analytic
  - C.** Demand
  - D. Placebo

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Identify possible sources of experimental bias in research.

Topic: Experimental Research

Feedback: Experimental Research

100. In experimental research, \_\_\_\_\_ are factors that systematically and undesirably influence the dependent variable.
- A. confederates
  - B.** confounds
  - C. placebos

## D. hypotheses

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Identify possible sources of experimental bias in research.

Topic: Experimental Research

Feedback: Experimental Research

101. Professor Bobson conducts a study that requires his participants to fill a questionnaire with two options: “ethical” or “unethical.” This leads most of his subjects to choose the ethical option. The professor’s choice marking his options as ethical or unethical is the study’s

A. confederate.

B. third variable.

C. demand characteristic.

D. placebo effect.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Identify possible sources of experimental bias in research.

Topic: Experimental Research

Feedback: Experimental Research

102. Brian wants to study how toddlers tackle difficult situations by themselves in their parents’ absence. While observing the children in a playground, Brian helps Timmy, a two-year-old, tie his shoelace. This is an example of

A. research participant bias.

B. experimenter bias.

C. placebo effect.

D. double-blind experiment.

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: Medium

Learning Objective: Identify possible sources of experimental bias in research.

Topic: Experimental Research

Feedback: Experimental Research

103. The placebo effect in an experimental study refers to the

A. difference between experimental and control groups.

B. experimenter’s expectation that the experimental group will perform better.

C. participants’ expectations producing an outcome.

D. effect of the third variable on the independent variable.

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Identify possible sources of experimental bias in research.

Topic: Experimental Research

Feedback: Experimental Research

104. \_\_\_\_\_ occurs when the behavior of participants in an experiment is influenced by how they think they are supposed to behave or by their expectations about what is happening to them.

A. Research participant bias

B. Double-blind bias

C. Experimenter bias

D. Placebo effect bias

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Identify possible sources of experimental bias in research.



Feedback: Experimental Research

105. In a drug study, a \_\_\_\_\_ is a harmless substance with no physiological effect that is given to participants in a control group so that they are treated identically to the experimental group except for the active agent.

- A. placebo
- B. confederate
- C. sample
- D. confound

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Identify possible sources of experimental bias in research.

Topic: Experimental Research

Feedback: Experimental Research

106. In a drug study, giving individuals in the control group a placebo pill allows researchers to determine whether

- A. research participant bias is more significant socially than experimenter bias.
- B. confederates are effective at changing the social context of the experiment.
- C. the operational definition of the dependent variable is the same as the operational definition of the independent variable.
- D. changes in the experimental group are due to the active drug agent.

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APA Outcome: 1.2 Develop a working knowledge of psychology's content domains

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Identify possible sources of experimental bias in research.

Topic: Experimental Research

Feedback: Experimental Research

107. As a part of a medical research study, a researcher exposes two groups of participants to either an actual painkiller or a sugar pill. The participants feel their pain being eliminated even with the sugar pill. In this case, the sugar pill is known as the

- A. confederate.
- B. random sample.
- C. placebo.
- D. independent variable.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: Medium

Learning Objective: Identify possible sources of experimental bias in research.

Topic: Experimental Research

Feedback: Experimental Research

108. Sonja is being treated by her psychiatrist for an anxiety disorder. Her therapist knows the extent of Sonja's faith in medication and gives her pills that contain no active ingredients. Despite this, Sonja's anxiety decreases. Sonja's recovery is due to her belief that the pill has taken away her anxiety. This is an example of

- A. informed consent.
- B. nondisclosure agreement.
- C. the confederate variable.
- D. the placebo effect.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: Medium

Learning Objective: Identify possible sources of experimental bias in research.

Topic: Experimental Research

Feedback: Experimental Research

109. Experimental data state that the painkiller Tafta takes at least 30 minutes to start having an effect on pain symptoms. However, most people report that their headaches begin to fade within just 10 minutes of taking Tafta. Which of the following is the best explanation for this finding?

- A. Subjects are giving false reports.
- B. Correlational data are inaccurate.
- C. Subjects are experiencing placebo effects.**
- D. Subjects are experiencing the effect of demand characteristics.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Identify possible sources of experimental bias in research.

Topic: Experimental Research

Feedback: Experimental Research

110. In a \_\_\_\_\_, neither the participants nor the experimenter administering the treatment are aware of which participants belong to the experimental group and which are part of the control group.

- A. double-blind experiment**
- B. controlled experiment
- C. correlational study
- D. case study

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Identify possible sources of experimental bias in research.

Topic: Experimental Research

Feedback: Experimental Research

111. Which of the following is an advantage of using a double-blind experiment?

- A. It does not require the use of confederates.
- B. It does not require the use of an independent variable.
- C. It ensures that neither the experimenter's nor the participant's expectations affect the outcome of the experiment.**
- D. It ensures that the behavior of research participants during the experiment is influenced by how they think they are supposed to behave.

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APA Outcome: 1.2 Develop a working knowledge of psychology's content domains

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Identify possible sources of experimental bias in research.

Topic: Experimental Research

Feedback: Experimental Research

112. A(n) \_\_\_\_\_ allows researchers to distinguish the specific effects of the independent variable from the possible effects of the experimenter's and participants' expectations about it.

- A. double-blind experiment**
- B. measure of central tendency
- C. meta-analytical study
- D. interview

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Identify possible sources of experimental bias in research.

Topic: Experimental Research

Feedback: Experimental Research

113. In drug studies, using a double-blind experiment design ensures that

- A. the experimenter cannot make subtle gestures signaling who is receiving a drug and who is not.**
- B. the confederate always gets the placebo.
- C. participants of the experiment are influenced by how they think they are supposed to behave or by their expectations about what is happening to them.
- D. confounds are more apparent than demand characteristics or experimenter bias.

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Identify possible sources of experimental bias in research.

Topic: Experimental Research

Feedback: Experimental Research

114. When psychologists conduct a study, the group of participants chosen for the study is referred to as the

- A. sample.
- B. study group.
- C. population.
- D. social group.

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Describe research settings and samples in psychological research.

Topic: Research Samples

Feedback: The Research Sample

115. When psychologists conduct a study, a \_\_\_\_\_ sample gives every member of the population an equal chance of being selected.

- A. convenience
- B. quota
- C. random
- D. stratified

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Describe research settings and samples in psychological research.

Topic: Research Samples

Feedback: The Research Sample

116. The entire group about which an investigator wants to draw conclusions is the

- A. confederate class.
- B. random sample.
- C. population.
- D. sample.

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Describe research settings and samples in psychological research.

Topic: Research Samples

Feedback: The Research Sample

117. Which of the following statements is true of research samples?

- A. They must be chosen by the control group of the experiment.
- B. They must be adaptive to the needs of the confederates used in research.
- C. They must include the entire group about which the investigator wants to draw conclusions.
- D. They must be representative of the population to which the investigator wants to generalize his or her results.

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APA Outcome: 1.2 Develop a working knowledge of psychology's content domains

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Describe research settings and samples in psychological research.

Topic: Research Samples

Feedback: The Research Sample

118. Dr. Wong is conducting an experiment on conformity. His research subjects include all of the students who are taking his introductory sociology course. In the context of the research, this entire group of students is referred to as the

- A. control group.
- B. sample.**
- C. experimental group.
- D. population.

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: Medium

Learning Objective: Describe research settings and samples in psychological research.

Topic: Research Samples

Feedback: The Research Sample

119. Ryan wants to study the behavior of employees in the call center industry in the country of Utopia. For his study, he designs a questionnaire and distributes it among 500 call center employees across the country. These 500 employees are the

- A. population.
- B. sample.**
- C. estimates.
- D. confederates.

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: Medium

Learning Objective: Describe research settings and samples in psychological research.

Topic: Research Samples

Feedback: The Research Sample

120. In the context of research settings, researchers who use \_\_\_\_\_ attempt to view behavior without disturbing the environment.

- A. naturalistic observation**
- B. controlled observation
- C. experimental research
- D. double-blind experimentation

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Describe research settings and samples in psychological research.

Topic: Naturalistic Observation

Feedback: The Research Setting

121. Justin, a psychologist, wants to study the behavior of call center employees when they attend a call. Which of the following research settings would be most effective for this study?

- A. experimental observation
- B. restricted design
- C. research laboratory
- D. naturalistic observation**

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: Medium

Learning Objective: Describe research settings and samples in psychological research.

Topic: Naturalistic Observation

Feedback: The Research Setting

122. Which of the following is an advantage of conducting psychological research in a laboratory?

- A. It is easy to conduct laboratory research without subjects knowing that they are being observed.
- B. A laboratory setting is close to the real world and therefore causes subjects to behave naturally.
- C. A laboratory is a controlled setting with many of the potential confounding factors of the real world removed.**
- D. It is possible to study all aspects of the mind and behavior in a laboratory.

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: High

Learning Objective: Describe research settings and samples in psychological research.

Topic: Research Setting

Feedback: The Research Setting

123. Dr. Jimand poses as a student for his research on foreign students who are adjusting to college life in the United States. Dr. Jimand lives in the dorm with the students and attends classes with them. The students do not know that he is a researcher. Which of the following research methods is Dr. Jimand using?

- A. formal experimentation
- B. survey method
- C. clinical method
- D. naturalistic observation**

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Describe research settings and samples in psychological research.

Topic: Naturalistic Observation

Feedback: The Research Setting

124. In descriptive statistics, the \_\_\_\_\_ is determined by adding up participants' scores and dividing by the number of scores.

- A. median
- B. standard deviation
- C. correlation coefficient
- D. mean**

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Clarify the meaning of statistical significance.

Topic: Measures of Central Tendency

Feedback: Descriptive Statistics

125. The head of accounting at Delores Inc. is computing a value that represents the company's financial performance for the previous year. The company made approximately \$90,000 in 11 out of the 12 months. In the last month of the fiscal year, the company made \$530,000. In this scenario, which measure of central tendency will be least effective as an accurate representation of financial performance?

- A. mean**
- B. median
- C. range
- D. mode

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Clarify the meaning of statistical significance.

Topic: Measures of Central Tendency

Feedback: Descriptive Statistics

126. Five students had the following scores on a psychological test: 10, 10, 15, 25, and 40. The mean of these five scores is

- A. 10.
- B. 15.
- C. 20.**
- D. 25.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: Medium

Learning Objective: Clarify the meaning of statistical significance.

Feedback: Descriptive Statistics

127. Five adults had the following scores on a personality test: 10, 10, 20, 30, and 50. The median of these five scores is
- A. 4.
  - B. 24.
  - C. 20.**
  - D. 120.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: Medium

Learning Objective: Clarify the meaning of statistical significance.

Topic: Statistics in Psychology

Feedback: Descriptive Statistics

128. In the context of measures of central tendency, the mode of a distribution of scores refers to the
- A. most common score in the sample.**
  - B. degree to which the scores are spread out in the sample.
  - C. average score of the sample.
  - D. difference between the lowest and highest score in the sample.

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Clarify the meaning of statistical significance.

Topic: Measures of Central Tendency

Feedback: Descriptive Statistics

129. Five students had the following scores on a geography test: 22, 22, 35, 45, and 50. The mode of these five scores is
- A. 22.**
  - B. 35.
  - C. 45.
  - D. 50.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: Medium

Learning Objective: Clarify the meaning of statistical significance.

Topic: Statistics in Psychology

Feedback: Descriptive Statistics

130. The annual earnings of five employees of Concard Inc. are \$19,000, \$19,000, \$23,000, \$24,000, and \$450,000. The mode of these five earnings is
- A. \$19,000.**
  - B. \$23,000.
  - C. \$450,000.
  - D. \$107,000.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: Medium

Learning Objective: Clarify the meaning of statistical significance.

Topic: Statistics in Psychology

Feedback: Descriptive Statistics

131. Liam, a psychology teacher, designs a questionnaire to determine the most preferred social media among students in his classroom. Which measure of central tendency should he use to get an accurate idea?
- A. range
  - B. mode**

- C. median
- D. mean

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: Medium

Learning Objective: Clarify the meaning of statistical significance.

Topic: Measures of Central Tendency

Feedback: Descriptive Statistics

132. Which of the following statements is true of the usage of mode in statistics?

- A. It is calculated by adding all the scores in a set of scores and then dividing by the number of scores.
- B. It is the score that falls exactly in the middle of the distribution of scores after they have been arranged from highest to lowest.**
- C. It can be particularly useful in cases in which information is desired about preference.
- D. It is the most used measure of central tendency.

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Clarify the meaning of statistical significance.

Topic: Measures of Central Tendency

Feedback: Descriptive Statistics

133. In descriptive statistics, range is a measure of

- A. central tendency that is the average for a sample.
- B. dispersion that tells researchers about the standard deviation of a sample.
- C. dispersion that is the difference between the highest and lowest scores.**
- D. central tendency that is the most common score in a sample.

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Clarify the meaning of statistical significance.

Topic: Measures of Central Tendency

Feedback: Descriptive Statistics

134. \_\_\_\_\_ is a measure of dispersion that indicates how much the scores in a sample vary around the mean of the sample.

- A. Correlation coefficient
- B. Median
- C. Range
- D. Standard deviation**

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Clarify the meaning of statistical significance.

Topic: Statistics in Psychology

Feedback: Descriptive Statistics

135. In a class test, Keith, Ethan, and Hannah score 6, 4, and 8 respectively. The mean of these scores is 6.

Therefore, the standard deviation of their scores is

- A. 5.00.
- B. 3.92.
- C. 2.00.**
- D. 10.50.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Clarify the meaning of statistical significance.

Topic: Statistics in Psychology

Feedback: Descriptive Statistics

136. \_\_\_\_\_ statistics are the mathematical methods that are used to indicate whether results for a sample are likely to generalize to a population.
- A. Regressive
  - B. Differential
  - C. Descriptive
  - D. Inferential**

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Clarify the meaning of statistical significance.

Topic: Statistics in Psychology

Feedback: Inferential Statistics

137. When using inferential statistics in psychological research studies, the researcher learns
- A. how to conduct a correlational study.
  - B. how to test predictions about a sample.**
  - C. the degree of bias in the data.
  - D. only the significant outcomes.

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: High

Learning Objective: Clarify the meaning of statistical significance.

Topic: Statistics in Psychology

Feedback: Inferential Statistics

138. In inferential statistics, \_\_\_\_\_ means that the differences observed between two groups are large enough that it is highly unlikely that those differences are merely due to chance.
- A. statistical significance**
  - B. double-blind
  - C. random assignment
  - D. operational definition

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APA Outcome: 1.1 Describe key concepts, principles, and overarching themes in psychology

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Medium

Learning Objective: Clarify the meaning of statistical significance.

Topic: Statistics in Psychology

Feedback: Inferential Statistics

139. In terms of statistical significance, what is considered to be the minimum level of probability that scientists will accept for concluding that observed differences are real and not due to chance?
- A. .001
  - B. .05**
  - C. .95
  - D. .99

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Medium

Learning Objective: Clarify the meaning of statistical significance.

Topic: Statistics in Psychology

Feedback: Inferential Statistics

140. In the context of inferential statistics, a confidence level of .05 means that
- A. if the odds are .05 or less that the differences are due to chance, the results are considered statistically significant.**
  - B. the researchers are confident about the methodology of their research to an extent of 5 percent.
  - C. the confidence level of participants in a research study is calculated to be .05.



D. if the study is conducted five times using the same variables and conditions, the result would be the same.

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Clarify the meaning of statistical significance.

Topic: Statistics in Psychology

Feedback: Inferential Statistics

141. Which of the following statements is true of statistical significance?

- A. Measure of confederate value is determined by the difference between range and mode.
- B.** The higher the number of cases, the easier it is to get statistical significance.
- C. With a very large sample, small differences in data are insignificant.
- D. Real-world significance is the same as statistical significance.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Understand

Difficulty: Medium

Learning Objective: Clarify the meaning of statistical significance.

Topic: Statistics in Psychology

Feedback: Inferential Statistics

142. Dr. Matthews has submitted a proposal to the institutional review board (IRB) of a university. At this university, she intends to conduct research on the socialization patterns of students from foreign countries. In the context of ethics guidelines, the IRB at the university will decide

- A. how many students she can include in her study.
- B. where she can publish the results of her study after it is completed.
- C. the dependent and independent variables to be used during the study.
- D.** whether her study meets ethical guidelines before it is initiated.

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APA Outcome: 3.1 Apply ethical standards to evaluate psychological science and practice

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: Medium

Learning Objective: Discuss ethical concerns regarding the use of animals and humans as participants in experimental research.

Topic: Ethics

Feedback: Ethics Guidelines

143. A team of psychology students would like to expose their classmates to an embarrassing experience in order to gather data for their term project. Their instructor has asked them to read the ethical guidelines published by the American Psychological Association (APA). She most likely wants them to understand that, as researchers, they

- A. cannot choose to influence independent variables.
- B. cannot conduct a study in which people will feel embarrassed.
- C.** must obtain the consent of the participants after informing them of the procedures.
- D. must use confederates in any research that they conduct.

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APA Outcome: 3.1 Apply ethical standards to evaluate psychological science and practice

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Discuss ethical concerns regarding the use of animals and humans as participants in experimental research.

Topic: Ethics

Feedback: Ethics Guidelines

144. Inmates at a correctional facility take part in an experiment on social development. Once the experiment is over, the correctional officer goes home and tells his roommates about the results of the study and about the inmates who did not perform well. In this scenario, which ethical guideline of psychological research has been violated by the correctional officer?

- A. limited deception
- B. informed consent
- C. freedom from coercion
- D.** confidentiality

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APA Outcome: 3.1 Apply ethical standards to evaluate psychological science and practice

Accessibility: Keyboard Navigation

*Bloom's: Apply*

*Difficulty: High*

*Learning Objective: Discuss ethical concerns regarding the use of animals and humans as participants in experimental research.*

*Topic: Ethics*

Feedback: Ethics Guidelines

145. In the context of ethical guidelines in psychological research, when data are confidential

- A. it is possible to link a participant's identity to his or her data.
- B. it is possible for the dependent variable to influence the independent variable.
- C. statistical significance becomes the same thing as real-world significance.
- D. informed consent and debriefing are optional.

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*APA Outcome: 3.1 Apply ethical standards to evaluate psychological science and practice*

*Accessibility: Keyboard Navigation*

*Bloom's: Understand*

*Difficulty: Medium*

*Learning Objective: Discuss ethical concerns regarding the use of animals and humans as participants in experimental research.*

*Topic: Ethics*

Feedback: Ethics Guidelines

146. Courtney, a young woman with an anxiety disorder, volunteers to participate in a psychological study so that she can earn \$100. She knows that the study will require her to reflect upon her childhood but she does not know that this experiment is unsuitable for individuals with anxiety.

Courtney's symptoms act up during the experiment and she restarts her therapy. In Courtney's case, the American Psychological Association (APA) ethics guideline that has most likely been violated is

- A. choice.
- B. informed consent.
- C. debriefing.
- D. confidentiality.

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*APA Outcome: 3.1 Apply ethical standards to evaluate psychological science and practice*

*Accessibility: Keyboard Navigation*

*Bloom's: Apply*

*Difficulty: High*

*Learning Objective: Discuss ethical concerns regarding the use of animals and humans as participants in experimental research.*

*Topic: Ethics*

Feedback: Ethics Guidelines

147. Aaron wants to study people's reaction to violent images. He lets all the participants of his experiment know that they will be subjected to violent images and asks if they are willing to participate. In this scenario, Aaron is

- A. ensuring that the study data will remain confidential.
- B. letting his participants know that they will be experiencing the placebo effect.
- C. obtaining informed consent from the participants.
- D. employing confederates to reduce experimenter bias.

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*APA Outcome: 3.1 Apply ethical standards to evaluate psychological science and practice*

*Accessibility: Keyboard Navigation*

*Bloom's: Apply*

*Difficulty: High*

*Learning Objective: Discuss ethical concerns regarding the use of animals and humans as participants in experimental research.*

*Topic: Ethics*

Feedback: Ethics Guidelines

148. Before agreeing to participate in a psychological research study, all participants must know what their participation will involve and what risks might develop. According to the American Psychological Association (APA) guidelines, which of the following addresses this issue?

- A. debriefing
- B. informed consent
- C. nondisclosure agreement
- D. meta-analysis

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*APA Outcome: 3.1 Apply ethical standards to evaluate psychological science and practice*

*Accessibility: Keyboard Navigation*

*Bloom's: Remember*

*Difficulty: Low*

*Learning Objective: Discuss ethical concerns regarding the use of animals and humans as participants in experimental research.*

*Topic: Ethics*

## Feedback: Ethics Guidelines

149. Haley reads in a magazine that people who drink five cups of coffee a day are smarter and more productive than people who do not drink coffee. She does not drink coffee but is now considering drinking coffee every day. Which of the following information does she need to consider before making this decision?

- A. Quality of research and findings is uniform among all psychology journals.
- B. Media tends to avoid drawing causal conclusions from correlational studies.
- C. Media reports of information often leave out details about the nature of the sample used in a given study.**
- D. Just as we can generalize from a small group to all people, we also can apply conclusions from a group to an individual.

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Illustrate critical thinking.

Topic: Critical Thinking

## Feedback: Avoid Overgeneralizing Based on Little Information

150. Jennifer has had a troubled past and has been emotionally affected by her parents' divorce. Jennifer's therapist suggests that she write a book about her life; he says that this will be therapeutic for Jennifer and might help her get closure on her past. Which of the following guidelines should Jennifer follow while attempting to write this book?

- A. She should explore various topics through her writing.
- B. She should focus on punctuation, grammar, and spelling while writing.
- C. She should dedicate herself to a few minutes of writing each day.**
- D. She should write about her negative thoughts and emotions, even if this makes her uncomfortable.

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Apply

Difficulty: High

Learning Objective: Describe scientific studies on health and wellness and their findings.

Topic: Health Psychology

## Feedback: The Scientific Method and Health and Wellness

151. What is an operational definition? Explain its importance in the field of psychology.

An operational definition is an objective description of a variable being measured in a given study. The purpose of an operational definition is to eliminate the fuzziness in defining psychological phenomena and provide a common language to facilitate communication among researchers.

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APA Outcome: 2.2 Demonstrate psychology information literacy

Bloom's: Remember

Difficulty: Low

Learning Objective: Outline the steps of the scientific method.

Topic: Scientific Method

152. Briefly describe the process of replication in the final step of psychology's scientific method.

Replicating a study means repeating it and getting the same results. Scientific conclusions rely on showing that the results remain the same, regardless of the specific scientist who conducts the study or the specific group of people who were studied. Direct replication means doing the study precisely as it was conducted in its original form. Conceptual replication means doing the study with different methods or different types of samples. For instance, a researcher might want to know if a particular strategy to enhance social skills works not only for college students but for older adults or for individuals with autism. If a research finding is shown again and again—that is, if it is replicated—across different researchers and different specific methods, it is considered reliable. It is a result on which researchers can depend.

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APA Outcome: 2.2 Demonstrate psychology information literacy

Bloom's: Remember

Difficulty: Medium

Learning Objective: Outline the steps of the scientific method.

Topic: Scientific Method

153. Discuss two limitations of using surveys in research.

Although surveys can be a straightforward way to measure psychological variables, constructing them requires care. For example, surveys can measure only what people think about themselves. Thus, if researchers are interested in studying a variable that they believe is unconscious, such as a psychodynamic drive, they cannot use a survey.

Furthermore, people do not always know the truth about themselves. If a person was answering a survey that asked, "Are you a generous person?" how might the person's answer compare to that of a friend who is asked to make that same rating about the person? One particular problem with

surveys and interviews is the tendency of participants to answer questions in a way that will make them look good rather than in a way that communicates what they truly think or feel.

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*APA Outcome: 2.2 Demonstrate psychology information literacy*

*Bloom's: Understand*

*Difficulty: Medium*

*Learning Objective: Identify and discuss the types of research that are used in psychology.*

*Topic: Survey Research*

154. Alfred conducted a study on the relationship between playground aggression observed in 5-year-old boys and their time spent playing with toy guns. The data he obtained gave him a correlation coefficient of +0.64. Explain what this coefficient means with reference to a graph, indicate the approximate appearance of the line, and discuss the strength and direction of the relationship.

The correlation coefficient represents a positive correlation between the two variables in the study. Because the correlation coefficient is a positive number, the slope of the line on a graph must move in the positive direction with one variable on each axis. A positive correlation means that as variable A increases, so does variable B.

(Note: The answer should clearly spell out that the correlation observed does not indicate that there is a cause and effect relationship between the variables. An answer that does not address cause and effect at all should not receive full credit.)

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*APA Outcome: 2.2 Demonstrate psychology information literacy*

*Bloom's: Understand*

*Difficulty: High*

*Learning Objective: Describe how correlational research determines the relationship between two sets of variables.*

*Topic: Correlational Research*

155. Explain the third variable problem of correlational research with an example.

Student answers will vary. The circumstance where a variable that has not been measured accounts for the relationship between two other variables is known as the third variable problem.

For example, a researcher measures two variables: the number of ice cream cones sold in a town and the number of violent crimes that occur in that town throughout the year. The researcher finds that ice cream cone sales and violent crimes are positively correlated, to the magnitude of +.50. This high positive correlation would indicate that as ice cream sales increase, so does violent crime. It would not be reasonable for the local paper to run the headline "Ice Cream Consumption Leads to Violence." A third variable that can possibly explain this correlation is "heat." Indeed, when it is hot outside, people are more likely both to purchase ice cream and to act aggressively.

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*APA Outcome: 2.2 Demonstrate psychology information literacy*

*Bloom's: Understand*

*Difficulty: High*

*Learning Objective: Describe how correlational research determines the relationship between two sets of variables.*

*Topic: Correlational Research*

156. Explain the difference between a dependent variable and an independent variable in experimental research.

An independent variable is the one believed to influence the other variable. The variable hypothesized to be influenced is called the dependent variable. The independent variable is the variable that the experimenter changes to see what its effects are; it is a potential cause.

A dependent variable in an experiment is the variable that may change as a result of manipulations of the independent variable. It represents the outcome (effect) in an experiment. As researchers manipulate the independent variable, they measure the dependent variable to test for any effect of the manipulated variable.

Independent and dependent variables are two of the most important concepts in psychological research.

Despite their similar names, they are very different. Remember that the independent variable is the cause, and the dependent variable is the effect.

The independent variable is the one that is manipulated, and the dependent variable is the outcome.

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*APA Outcome: 2.2 Demonstrate psychology information literacy*

*Bloom's: Understand*

*Difficulty: Medium*

*Learning Objective: Understand how experimental research can establish cause and effect relationships.*

*Topic: Variables*

157. Dr. Schwartzmiller believes that herbal medicines significantly reduce the number of depressive symptoms in women. She wants to use experimental methods to test her hypothesis. What components of a well-designed experiment should be included in this study?

To test her hypothesis experimentally, Dr. Schwartzmiller should randomly assign her participants to receive either no medicine (control group) or some amount of the medicine (experimental groups). This means that participants are equally likely to be in either the control or experimental groups, and that all the other ways in which participants differ from each other will be distributed across the groups. Participants in the control group receive no medicine, whereas those in the experimental groups receive some dose of the medicine (e.g., 1 pill, 2 pills, and so on). The importance of having a control group is that Schwartzmiller will be able to say that any changes in the experimental participants' number of symptoms are due to the medicine, and not due to normal fluctuations in depressive symptoms.

158. Explain the concepts of experimental groups and control groups with examples.

Student answers will vary. An experimental group consists of participants in an experiment who receive the drug or other treatment under study—that is, those who are exposed to the change that the independent variable represents. On the other hand, a control group consists of participants in an experiment who are as much like the experimental group as possible and who are treated in every way like the experimental group except for a manipulated factor, the independent variable. For example, a researcher notices that people who listen to classical music seem to be of above average intelligence. He creates two groups: one that listens to classical music and one that does not. To test for differences in intelligence, the researcher then measures intelligence in the two groups. Here, the experimental group is the group that listened to classical music; the no-music group is the control group.

159. Describe the placebo effect. Provide an example to explain how this effect works.

Student answers will vary. The placebo effect occurs when participants' expectations, rather than the experimental treatment, produce a particular outcome. Participants in a drug study might be assigned to an experimental group that receives a pill containing an actual painkiller or to a control group that receives a placebo pill. A placebo is a harmless substance that has no physiological effect. This placebo is given to participants in a control group so that they are treated identically to the experimental group except for the active agent—in this case, the painkiller. Giving individuals in the control group a placebo pill allows researchers to determine whether changes in the experimental group are due to the active drug agent and not simply to participants' expectations.

160. Explain the concepts of random assignment and random sample. State the difference between the two.

Random assignment refers to the assignment of research participants to groups by chance, to reduce the likelihood that an experiment's results will be due to preexisting differences between groups. A random sample refers to a sample that gives every member of the population an equal chance of being selected.

A random sample is not the same thing as random assignment. Random assignment is about making sure experimental and control groups are equivalent, and a random sample is about selecting participants from a population so that the sample is representative of that population.

161. List four drawbacks of doing research in a laboratory.

Although laboratory research provides a great deal of control, doing research in the laboratory has drawbacks.

First, it is almost impossible to conduct research in a lab without the participants knowing they are being studied. Second, the laboratory setting is not the real world and therefore can cause the participants to behave unnaturally. A third drawback of laboratory research is that individuals who are willing to go to a university laboratory may not be representative of groups from diverse cultural backgrounds. Those who are unfamiliar with university settings and with the idea of "helping science" may be intimidated by the setting. Fourth, some aspects of the mind and behavior are difficult if not impossible to examine in the laboratory.

162. Define the term external validity, and determine the research technique that provides the highest degree of external validity.

External validity is the degree to which the findings from a research design actually reflect what is going on in the “real world.” Naturalistic observation provides the highest degree of external validity, because the data is collected in “real-world” settings.

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*APA Outcome: 2.2 Demonstrate psychology information literacy*

*Bloom's: Understand*

*Difficulty: High*

*Learning Objective: Understand how experimental research can establish cause and effect relationships.*

*Topic: Validity*

163. Given the following data set, calculate the mean, and discuss why the mean in this case is, or is not, the best measure of central tendency.  
12, 16, 11, 2, 44, 15

Mean is 16.7 for this particular data set. The mean is not a very effective choice because of the two extreme scores—2 and 44.

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*APA Outcome: 2.4 Interpret, design, and conduct basic psychological research*

*Bloom's: Understand*

*Difficulty: Medium*

*Learning Objective: Clarify the meaning of statistical significance.*

*Topic: Measures of Central Tendency*

164. Contestants of reality television (TV) shows are often asked to engage in unpleasant behaviors, such as eating bugs or living in isolation for days. While viewers think they are learning about human nature, these experiments are not real psychological studies that employ the scientific method and ethical guidelines as put forth by the American Psychological Association. Describe why these TV shows do not meet the ethical guidelines that psychological research must follow.

These TV shows do not meet the ethical guidelines because the contestants have most often not given their informed consents. Moreover, the TV shows use deception, unreasonable levels of risk, and exorbitant award money as it relates to undue persuasion. There is also a lack of ecological validity. In other words, one cannot really learn much from the contestants of reality TV shows.

*Page:*

*APA Outcome: 2.2 Demonstrate psychology information literacy*

*Bloom's: Understand*

*Difficulty: Medium*

*Learning Objective: Discuss ethical concerns regarding the use of animals and humans as participants in experimental research.*

*Topic: Ethics*

165. Briefly describe the research of James Pennebaker with regard to expressive writing and health, and present the guidelines an individual should follow in order to benefit from the healing power of writing.

Pennebaker's research explored the connections between traumatic life events, expressive writing, health, and work performance. He found that writing about traumatic life events had healing effects in that the individuals had improved psychological well-being in comparison to those who experienced similar events but did not write about them. The following guidelines are suggested for those who wish to benefit from the healing power of writing: find a quiet place to write; limit writing to one topic; write for a few minutes each day; do not worry about the conventions of writing; and write about the positives in life.

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*APA Outcome: 2.2 Demonstrate psychology information literacy*

*Bloom's: Remember*

*Difficulty: Medium*

*Learning Objective: Describe scientific studies on health and wellness and their findings.*

*Topic: Health Psychology*

166. The first step in the scientific method of psychology is formulating hypotheses and predictions.

**FALSE**

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*APA Outcome: 2.2 Demonstrate psychology information literacy*

*Accessibility: Keyboard Navigation*

*Bloom's: Remember*

*Difficulty: Low*

*Learning Objective: Outline the steps of the scientific method.*

*Topic: Scientific Method*

Feedback: Psychology's Scientific Method

167. **FALSE**

The more hypotheses a theory generates, the more likely it is that the theory is false.

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*APA Outcome: 2.2 Demonstrate psychology information literacy*

*Accessibility: Keyboard Navigation*

*Bloom's: Remember*  
*Difficulty: Low*  
*Learning Objective: Distinguish between theory and hypothesis.*  
*Topic: Hypotheses*

#### Feedback: Step 2. Formulating Hypotheses and Predictions

168. In the context of the scientific method of psychology, data refers to all the information a researcher collects when carrying out a study.  
**TRUE**

*Page: 29*  
*APA Outcome: 2.2 Demonstrate psychology information literacy*  
*Accessibility: Keyboard Navigation*  
*Bloom's: Remember*  
*Difficulty: Low*  
*Learning Objective: Outline the steps of the scientific method.*  
*Topic: Scientific Method*

#### Feedback: Step 3. Testing Through Empirical Research

169. In the context of evaluating a theory, meta-analysis refers to the process of establishing causal relationships between variables.  
**FALSE**

*Page: 29*  
*APA Outcome: 2.2 Demonstrate psychology information literacy*  
*Accessibility: Keyboard Navigation*  
*Bloom's: Remember*  
*Difficulty: Low*  
*Learning Objective: Outline the steps of the scientific method.*  
*Topic: Theories*

#### Feedback: Step 5. Evaluating the Theory

170. In psychology, a correlational research study tells the researcher which variable is the cause and which is the effect.  
**FALSE**

*Page: 33*  
*APA Outcome: 2.2 Demonstrate psychology information literacy*  
*Accessibility: Keyboard Navigation*  
*Bloom's: Remember*  
*Difficulty: Low*  
*Learning Objective: Describe how correlational research determines the relationship between two sets of variables.*  
*Topic: Correlational Research*

#### Feedback: Correlational Research

171. In the context of correlational research, when a correlation coefficient is positive, it means that one variable caused another variable to occur.  
**FALSE**

*Page: 33*  
*APA Outcome: 2.2 Demonstrate psychology information literacy*  
*Accessibility: Keyboard Navigation*  
*Bloom's: Understand*  
*Difficulty: Medium*  
*Learning Objective: Describe how correlational research determines the relationship between two sets of variables.*  
*Topic: Correlational Research*

#### Feedback: Correlational Research

172. If a causal link did exist between two variables, a correlation between them can tell us about the direction of that link.  
**FALSE**

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*APA Outcome: 2.2 Demonstrate psychology information literacy*  
*Accessibility: Keyboard Navigation*  
*Bloom's: Understand*  
*Difficulty: Medium*  
*Learning Objective: Describe how correlational research determines the relationship between two sets of variables.*  
*Topic: Correlational Research*

#### Feedback: Correlational Research

173. In an experiment, the independent variable is what the experimenter arranges or has control over to allow a comparison.  
**TRUE**

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*APA Outcome: 2.2 Demonstrate psychology information literacy*

Accessibility: Keyboard Navigation  
Bloom's: Remember  
Difficulty: Low  
Learning Objective: Understand how experimental research can establish cause and effect relationships.  
Topic: Variables

Feedback: Experimental Research

174. In a psychological experiment, the dependent variable is the cause and the independent variable is the effect.  
**FALSE**

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APA Outcome: 2.2 Demonstrate psychology information literacy  
Accessibility: Keyboard Navigation  
Bloom's: Remember  
Difficulty: Low  
Learning Objective: Understand how experimental research can establish cause and effect relationships.  
Topic: Variables

Feedback: Experimental Research

175. A quasi-experimental design does not randomly assign participants to conditions because such assignment is either impossible or unethical.  
**TRUE**

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APA Outcome: 2.2 Demonstrate psychology information literacy  
Accessibility: Keyboard Navigation  
Bloom's: Understand  
Difficulty: Medium  
Learning Objective: Understand how experimental research can establish cause and effect relationships.  
Topic: Research Designs and Methods

Feedback: Experimental Research

176. In a psychological experiment, the experimental group is exposed to the change that the independent variable represents.  
**TRUE**

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APA Outcome: 2.2 Demonstrate psychology information literacy  
Accessibility: Keyboard Navigation  
Bloom's: Remember  
Difficulty: Low  
Learning Objective: Understand how experimental research can establish cause and effect relationships.  
Topic: Experimental Research

Feedback: Experimental Research

177. The internal validity of a study refers to the degree to which an experimental design actually reflects the realworld issues it is supposed to address.  
**FALSE**

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APA Outcome: 2.2 Demonstrate psychology information literacy  
Accessibility: Keyboard Navigation  
Bloom's: Remember  
Difficulty: Low  
Learning Objective: Understand how experimental research can establish cause and effect relationships.  
Topic: Validity

Feedback: Experimental Research

178. Double-blind experiments are conducted in an effort to rule out experimenter bias as well as research participant bias.  
**TRUE**

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APA Outcome: 2.2 Demonstrate psychology information literacy  
Accessibility: Keyboard Navigation  
Bloom's: Remember  
Difficulty: Low  
Learning Objective: Identify possible sources of experimental bias in research.  
Topic: Experimental Research

Feedback: Experimental Research

179. In drug studies, the control group typically receives the drug with the active ingredient, while the experimental group receives the placebo.  
**FALSE**



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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Identify possible sources of experimental bias in research.

Topic: Research Samples

Feedback: The Research Sample

180. The careful observation of behavior in laboratory settings is called naturalistic observation.

**FALSE**

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Describe research settings and samples in psychological research.

Topic: Naturalistic Observation

Feedback: The Research Setting

181. In a set of numbers, the mode is the number that divides the distribution in half when the numbers are arranged from lowest to highest.

**FALSE**

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Clarify the meaning of statistical significance.

Topic: Measures of Central Tendency

Feedback: Descriptive Statistics

182. Standard deviation is a measure of central tendency that is the difference between the highest and lowest scores.

**FALSE**

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APA Outcome: 2.4 Interpret, design, and conduct basic psychological research

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Clarify the meaning of statistical significance.

Topic: Statistics in Psychology

Feedback: Descriptive Statistics

183. When a psychological study uses deception, the principle of informed consent is violated.

**TRUE**

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Discuss ethical concerns regarding the use of animals and humans as participants in experimental research.

Topic: Ethics

Feedback: Ethics Guidelines

184. Researchers sometimes use procedures with animals that would be unethical with humans.

**TRUE**

Page: 53

APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Discuss ethical concerns regarding the use of animals and humans as participants in experimental research.

Topic: Animals in Research

Feedback: Ethical Treatment of Research Animals

185. Studies conducted by psychologists are automatically accepted by the rest of the research community

**FALSE**

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APA Outcome: 2.2 Demonstrate psychology information literacy

Accessibility: Keyboard Navigation

Bloom's: Remember

Difficulty: Low

Learning Objective: Illustrate critical thinking.

Topic: Critical Thinking

Feedback: Consider the Source of Psychological Information

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