Research Methods for the Behavioral Sciences 7th edition Gravetter Test Bank

SKU: 9798214143613-TEST-BANK

Name:_____ Class:_____ Date:_____

Chapter 01 - Introduction, Acquiring Knowledge, and the Scientific Method

1. You have always disliked chocolate-covered raisins, even though everyone around you says that they taste great. Your decision is based on the method of ____.
   a. empiricism
   b. faith
   c. tenacity
   d. authority

ANSWER: c

2. You have always been afraid to fly, even though everyone around you says flying is safe. Your decision is based on the method of _____.
   a. empiricism
   b. faith
   c. tenacity
   d. authority

ANSWER: c

3. A student who believes that wearing a "lucky hat" influences their performance on an examination uses the method of _____.
   a. empiricism
   b. faith
   c. tenacity
   d. authority

ANSWER: c

4. A person buys a lottery ticket because they feel it is lucky is using the method of _____.
   a. empiricism
   b. faith
   c. tenacity
   d. intuition

ANSWER: d

5. Which method of acquiring knowledge is used when people make decisions based on instinct or hunches?
   a. intuition
   b. rationalism
   c. tenacity
   d. Authority

ANSWER: a

6. What is a potential problem with the method of authority?
   a. Consulting an expert is often a time-consuming way to obtain answers.
   b. Consulting an expert is often the most challenging way to obtain answers.
   c. Finding an expert is often a challenging thing to do.
   d. An expert may be biased in giving opinions or advice.

ANSWER: d

Copyright Cengage Learning. Powered by Cognero.

Research Methods for the Behavioral Sciences 7th edition Gravetter Test Bank

Chapter 01 - Introduction, Acquiring Knowledge, and the Scientific Method

7. Using a celebrity to sell clothing in a television commercial relies upon which nonscientific method of acquiring knowledge?

a. the method of tenacity
b. the method of authority
c. the empirical method
d. the rational method

ANSWER: b

8. The mode of inquiry, called the method of faith, is a variant of which other method of inquiry?

a. Empiricism
b. rationalism
c. the method of authority
d. the scientific method

ANSWER: c

9. A stable owner just learned that one of the mares in the stable is pregnant, and they say they have a hunch that the mare will produce a female offspring. In this case, the stable owner is using the _____.

a. method of authority
b. rational method
c. empirical method
d. method of intuition

ANSWER: d

10. A young child, without doubt or challenge, believes everything their kindergarten teacher says is true. This is an example of _____.

a. the method of faith
b. the rational method
c. the empirical method
d. the method of intuition

ANSWER: a

11. Jin and Talia weren't tall enough last year to ride the rollercoaster. Jin went to the park this year and was tall enough to ride. Since Talia is taller than Jin, Talia thinks they can both ride the rollercoaster. Talia is using the _____.

a. method of empiricism
b. rational method
c. method of authority
d. scientific method

ANSWER: b

12. An explanation is rational if it is based on _____.

a. widely held beliefs
b. logical reasoning
c. evidence of the senses
d. respect for the source of the explanation

Copyright Cengage Learning. Powered by Cognero.

Research Methods for the Behavioral Sciences 7th edition Gravetter Test Bank

ANSWER: b

13. An explanation is empirical if it is based on _____.
    a. widely held beliefs
    b. logical reasoning
    c. evidence of the senses
    d. respect for the source of the explanation

ANSWER: c

14. Which potential problem can occur when the rational method is used?
    a. People may lack skills in logical reasoning.
    b. It requires hands-on experience so that it can be messy or even dangerous.
    c. There is no method available for testing the accuracy of the claims.
    d. This method requires lengthy and difficult testing.

ANSWER: a

15. A diner at a café believes that food poisoning causes food aversions, so when the diner finds out that their dinner date hates seafood, the diner assumes that their date must have had food poisoning after eating seafood sometime in the past. The diner at the café is using the _____.
    a. method of empiricism
    b. rational method
    c. method of tenacity
    d. scientific method

ANSWER: b

16. An artist tries putting a freshly painted canvas outside during a rainstorm to see how the painting will change from the pattern of the raindrops. Which method of acquiring knowledge is the artist using?
    a. method of empiricism
    b. rational method
    c. method of authority
    d. scientific method

ANSWER: a

17. Visual illusions, such as the vertical/horizontal illusion, demonstrate a problem with which method of acquiring knowledge?
    a. rational
    b. authority
    c. empirical
    d. scientific

ANSWER: c

18. When your doctor uses a stethoscope to listen to your heart, the doctor gathers information using the _____.
    a. method of authority
    b. rational method
    c. empirical method

Copyright Cengage Learning. Powered by Cognero.

Research Methods for the Behavioral Sciences 7th edition Gravetter Test Bank

d. method of intuition

ANSWER: c

19. An explanation is tenacious if it is based on _____.
    a. widely held beliefs
    b. logical deductions
    c. evidence of the senses
    d. respect for the source

ANSWER: a

20. A limitation of using the method of empiricism is that _____.
    a. people are generally less skillful at reasoning
    b. perception is more accurate than sensation
    c. the process can be time-consuming and often risky
    d. there is no mechanism for validating conclusions

ANSWER: c

21. A set of premise statements logically combined to yield a conclusion is known as ____.
    a. intuition
    b. an argument
    c. rational method
    d. reasoning

ANSWER: b

22. In logical reasoning, which of the following describes facts or assumptions that are presumed to be true?
    a. Intuition
    b. Arguments
    c. Premise statements
    d. Reasoning

ANSWER: c

23. When people make an observation, then form a hypothesis that explains the observation, and then make more observations to test the credibility of the hypothesis, they are using the _____.
    a. empirical method
    b. rational method
    c. scientific method
    d. method of authority

ANSWER: c

24. Which of the following statements accurately describes the scientific method?
    a. It involves hypotheses rather than predictions.
    b. It relies solely on deductive reasoning.
    c. It is a circular process leading to a tentative answer.
    d. It effectively combines intuition with empirical data.

Copyright Cengage Learning. Powered by Cognero.

Research Methods for the Behavioral Sciences 7th edition Gravetter Test Bank

ANSWER: c

25. What kind of reasoning uses a general statement to make conclusions about specific examples?
    a. inductive
    b. deductive
    c. scientific
    d. predictive

ANSWER: b

26. What kind of reasoning uses a few specific observations to produce a statement about a larger possible set of observations?
    a. inductive
    b. deductive
    c. scientific
    d. predictive

ANSWER: a

27. Using observations of a small number of humans to make a statement about human behavior in general is an example of _____.
    a. inductive reasoning
    b. deductive reasoning
    c. practical reasoning
    d. predictive reasoning

ANSWER: a

28. Based on observations of his own children, Jean Piaget formed a theory about the cognitive development of all children. This is an example of _____.
    a. inductive reasoning
    b. deductive reasoning
    c. practical reasoning
    d. predictive reasoning

ANSWER: a

29. Based on observations of sharks in an aquarium, a zoologist formed a theory about the behavior of all sharks. This is an example of _____.
    a. inductive reasoning
    b. deductive reasoning
    c. practical reasoning
    d. predictive reasoning

ANSWER: a

30. A hypothesis is a _____, and a prediction is a _____.
    a. specific statement; general statement
    b. specific statement; specific statement
    c. general statement; specific statement

Copyright Cengage Learning. Powered by Cognero.

Research Methods for the Behavioral Sciences 7th edition Gravetter Test Bank

d. general statement; general statement

ANSWER: c

31. The third step of the scientific method uses a general hypothesis to develop a testable prediction. This step involves the use of _____.
    a. induction
    b. deduction
    c. analysis
    d. synthesis

ANSWER: b

32. In the scientific method, a prediction is evaluated by _____.
    a. making systematic, direct observations
    b. determining the hypothesis of best fit
    c. logically evaluating the implications
    d. using it to explain established phenomena

ANSWER: a

33. What does the statement "science is empirical" mean?
    a. Scientific answers are obtained by making observations.
    b. Scientific answers are obtained through deductive reasoning.
    c. Scientific answers are obtained through inductive reasoning.
    d. Scientific answers are made available for others to evaluate.

ANSWER: a

34. The weather, the economy, and your state of health are all examples of _____.
    a. hypotheses
    b. variables
    c. predictions
    d. empiricism

ANSWER: b

35. The phrase "science is objective" means that scientific answers are _____.
    a. based on direct observation
    b. based on logical reasoning
    c. free of researcher bias
    d. made available for evaluation by others

ANSWER: c

36. The phrase "the umpire was fair to both teams" means that the umpire's decisions are ____.
    a. based on direct observation
    b. based on logical reasoning
    c. free from bias
    d. made available for evaluation by others

Copyright Cengage Learning. Powered by Cognero.

Research Methods for the Behavioral Sciences 7th edition Gravetter Test Bank

ANSWER: c

37. Publicly repeating a study by following its methods exactly is referred to as _____.
    a. Empiricism
    b. Replication
    c. Control
    d. Tenacity

ANSWER: b

38. Expectant parents are researching methods used to treat autism spectrum disorders and begin by searching the internet. Which statement should make them suspicious that they are on a site rooted in pseudoscience?
    a. The website focuses on testimonials from family members that describe seemingly miraculous cures.
    b. The site contains links to research published in peer-reviewed journals that evaluate the treatment method.
    c. The treatment methods described on the site are clearly defined, as are the expected outcomes.
    d. The site provides clear explanations of how treatment methods are tied to existing theories of the causes of autism.

ANSWER: a

39. Which of the following best describes the concept that a theory must be able to explain exactly what observable findings would demonstrate that it is wrong?
    a. Pseudoscience
    b. Deduction
    c. Falsifiability
    d. Empiricism

ANSWER: c

40. A distinction between science and pseudoscience is that _____.
    a. science examines theoretical as opposed to practical aspects
    b. science is based on testable and refutable hypotheses
    c. science examines a topic that has never been investigated
    d. science aims to make definite conclusions about a topic

ANSWER: b

41. A young adult concerned about their grandparent recently diagnosed with dementia wants to learn more about the disorder. They are reading jacket quotes from some currently popular books. Which quote should reassure them that the book is based on science rather than pseudoscience?
    a. “This book saved my spouse from a lonely death in a nursing home!”
    b. “Big Pharma is hiding the cure for dementia!”
    c. “From laboratory research to clinical trials: Evaluating the treatment of dementia.”
    d. “Find out what REALLY causes dementia and why the health agencies don’t care.”

ANSWER: c

42. Pseudoscience is based on _____.
    a. testable hypotheses
    b. objective evidence

Copyright Cengage Learning. Powered by Cognero.

Research Methods for the Behavioral Sciences 7th edition Gravetter Test Bank

c. subjective evidence
d. falsifiable facts

ANSWER: c

43. How do quantitative research and qualitative research differ?
a. They generate different types of data.
b. They rely on different nonscientific ways of knowing.
c. Only quantitative research involves data collection.
d. One type relies on hypotheses, while the other depends on predictions.

ANSWER: a

44. Which of the following is based on measuring variables for individual participants to obtain scores, usually numerical values, which are submitted to statistical analysis for summary and interpretation?
a. Qualitative research
b. Quantitative research
c. Pseudoscience
d. Premise statements

ANSWER: b

45. Which of the following is based on making observations that are summarized and interpreted in a narrative report?
a. Qualitative research
b. Quantitative research
c. Pseudoscience
d. Premise statements

ANSWER: a

46. A researcher conducted a study where 50 rats were assigned to different treatments and tested. In the study, the rats are called research _____.
a. associates
b. cohorts
c. Participants
d. Subjects

ANSWER: d

47. A researcher conducted a study where 50 college students were assigned to different treatments and tested. In the study, the students are called research _____.
a. associates
b. cohorts
c. participants
d. subjects

ANSWER: c

48. What should you do first if you are a psychologist embarking on a research study?
a. Select a general idea and search the literature to form the research question.

Copyright Cengage Learning. Powered by Cognero.

Research Methods for the Behavioral Sciences 7th edition Gravetter Test Bank

b. Form a testable, refutable hypothesis based on current theories.
c. Decide which individuals should participate and how they should be recruited.
d. Select a research and analytic strategy based on conventional methods.

ANSWER: a

49. You have dinner reservations at 7:30 at a restaurant that is 30 minutes away, and it is already 7:20, leading you to conclude that you will be late. This is an example of using which method?
a. Empirical method
b. Rational method
c. Method of intution
d. Method of tenacity

ANSWER: a

50. Based on a few students you know, you decide that full scholarship athletes are physically fit and that music majors are often in practice rooms with their instruments. This is an example of which type of which of the following?
a. Deductive reasoning
b. Inductive reasoning
c. Method of intuition
d. Method of authority

ANSWER: b

51. Part of the scientific method involves using which of the following to make predictions?
a. Hypotheses
b. Theories
c. Variables
d. The scientific methods

ANSWER: a

52. People who gamble who believe that they will be more successful if they wear a "lucky" hat are using the method of faith.
a. True
b. False

ANSWER: False

53. Finding information in a textbook or ebook is an example of using the rational method of inquiry.
a. True
b. False

ANSWER: False

54. A birdwatcher uses the rational method when, upon seeing that birds eating certain berries are unharmed, they conclude that the berries are non-poisonous.
a. True
b. False

ANSWER: True

Copyright Cengage Learning. Powered by Cognero.

Research Methods for the Behavioral Sciences 7th edition Gravetter Test Bank

Chapter 01 - Introduction, Acquiring Knowledge, and the Scientific Method

55. A common application of the rational method occurs when people try to think through a problem before they try out different solutions.

a. True

b. False

ANSWER: True

56. The rational method is employed when the chef concludes that the meals are delicious after seeing that diners who eat them become repeat customers of the restaurant.

a. True

b. False

ANSWER: True

57. You have a terrible toothache, so you visit a dentist to find out what is wrong with your tooth. This is an example of using the method of authority.

a. True

b. False

ANSWER: True

58. The method of intuition can be valuable when making ethical or moral decisions by doing what "feels" right.

a. True

b. False

ANSWER: True

59. Based on the interactions with all of the bartenders you have known, you decide that the bartender you will have tonight will likely be organized and very sociable. This is an example of inductive reasoning.

a. True

b. False

ANSWER: False

60. Using a hypothesis to predict how people will behave demonstrates the use of inductive reasoning

a. True

b. False

ANSWER: False

61. In the scientific method, the process of forming a hypothesis means that you are trying to find a possible explanation for the phenomenon that you have observed.

a. True

b. False

ANSWER: True

62. If the scientific method is being used to evaluate a hypothesis predicting a specific relationship between two variables, then it is essential that both variables can be measured.

a. True

b. False

ANSWER: True

Copyright Cengage Learning. Powered by Cognero.

Research Methods for the Behavioral Sciences 7th edition Gravetter Test Bank

63. Collecting data without a planned sample size inflates the likelihood that a study will show an effect based on random chance alone.
    a. True
    b. False
ANSWER: True

64. An important element of the scientific method is that research results should be made public.
    a. True
    b. False
ANSWER: True

65. Research participants must be informed of all relevant aspects of the study, including any risks or dangers that may be involved.
    a. True
    b. False
ANSWER: True

66. Pseudoscience is based on objective, empirical evidence.
    a. True
    b. False
ANSWER: False

67. Science is based on objective, empirical evidence.
    a. True
    b. False
ANSWER: True

68. In the scientific method, the investigation starts after the researcher has formed a hypothesis and made a specific prediction.
    a. True
    b. False
ANSWER: True

69. Induction involves generalizing from many to a few, while deduction reasoning from the few to the many.
    a. True
    b. False
ANSWER: False

70. One critical component of the scientific method is that all answers or explanations must be demonstrated empirically.
    a. True
    b. False
ANSWER: True

71. When selecting an answer to serve as your hypothesis, you should pick the answer that seems most likely correct.
    a. True

Copyright Cengage Learning. Powered by Cognero.

Research Methods for the Behavioral Sciences 7th edition Gravetter Test Bank

b. False

ANSWER: True

72. Humans who participate in a research study are properly called research subjects.

a. True

b. False

ANSWER: False

73. No universally accepted definition of pseudoscience currently exists.

a. True

b. False

ANSWER: True

74. One difference between scientific and non-scientific answers is that the scientific answer is more likely to be absolute or final.

a. True

b. False

ANSWER: False

75. It is considered acceptable research practice to gather data without establishing the target sample size (number of participants).

a. True

b. False

ANSWER: False

76. Ethical and other constraints must be considered during the research process.

a. True

b. False

ANSWER: True

77. Describe a problem that can arise when you are trying to obtain information using only the method of authority. How can this problem be avoided using the scientific method?

ANSWER: Potential problems with the method of authority are (1) that the expert may not really be an expert or may be providing information outside their area of expertise, and (2) that the method does not include any mechanism to verify the information. These problems are corrected using the scientific method because empirical demonstrations always verify the results.

78. Describe a problem that can arise when you are trying to obtain information using only the method of tenacity. How can this problem be avoided using the scientific method?

ANSWER: One problem with the method of tenacity is that the information acquired might not be accurate. Another pitfall of the method of tenacity is that there is no method for correcting erroneous ideas. Even in the face of evidence to the contrary, a widely accepted belief can be very difficult to change. These problems are corrected in the scientific method because an empirical demonstration always verifies the results.

79. Describe how the rational method and the method of empiricism are both utilized as parts of the scientific method.

ANSWER: The rational method is used to develop a hypothesis based on observations (inductive reasoning) and when the hypothesis is used to make predictions (deductive reasoning) that will be tested. The method of empiricism is

Copyright Cengage Learning. Powered by Cognero.

Research Methods for the Behavioral Sciences 7th edition Gravetter Test Bank

used when scientists make systematic, planned observations to evaluate the predictions from their hypothesis.

80. Distinguish between induction and deduction and describe how each is used in the scientific method.

ANSWER: Induction involves using a few specific observations to form a general statement about all possible observations. In the scientific method, researchers use inductive reasoning to create a general hypothesis that is based on a small number of initial observations. Deduction involves using a general statement to make predictions about specific examples. In the scientific method, researchers use a general hypothesis to predict what should occur when they make systematic, planned observations in a research study; that is when specific individuals are observed in a specific situation.

81. Suppose that you are debating whether to hitchhike across country or take the bus. Explain how the rational method could help you to decide.

ANSWER: The **rational method**, also known as **rationalism**, involves seeking answers by logical reasoning. First, begin with a set of known facts or assumptions about hitchhiking and bus travel and use logic to reach a conclusion or get an answer to a question. Unless both of the **premise statements** are true about hitchhiking and bus travel, the conclusion is not necessarily true, even in a valid logical **argument**. In general, a logical conclusion is only valid for the specific situation described by the premise statements. If the premise statements are incomplete or do not totally represent the real-world situation of hitchhiking and traveling by bus, then the conclusion might not be accurate.

82. Identify the basic steps in the scientific method, and describe how the scientific method is used to answer questions such as, "Why are some new businesses successful and others are not?"

ANSWER: After observing that some new businesses are successful and some are not (*step 1*), you would develop a hypothesis to try to explain the phenomenon (*step 2*). For example, a good work ethic may lead to success, whereas a poor work ethic leads to failure. Based on this hypothesis, you would make a specific research prediction (*step 3*). For example, suppose you selected 50 new business owners and asked each one to rate their level of work ethic and the overall success of their business. In that case, you should find a strong relationship between work ethic and success. Next, you would empirically evaluate the hypothesis by selecting 50 new business owners and observing the two variables (*step 4*). Based on the outcome of the observations in step 4, you could either reject the hypothesis (if it is not work ethic, it could be some other factor) or you could refine the original hypothesis, for example, trying to determine what factors lead to successful or unsuccessful new businesses (*step 5*).

83. Explain what it means to say that the scientific method or the research process can be viewed as a never-ending circle or a spiral of steps rather than a linear process that leads to an end.

ANSWER: Research always produces tentative answers. It is always understood that new information may appear tomorrow that changes the way we think about behavior today. The results from one research study usually generate new questions for future research, or the results may be challenged or tested by additional research. Thus, the "end" of one research study is usually the beginning for other studies, and the cycle continues.

84. Distinguish between science and pseudoscience.

ANSWER: Science is based on evidence gathered from systematic and objective observations. Pseudoscience tends to rely on subjective evidence, anecdotal reports, and a few hand-picked examples of success. Science examines hypotheses and theories that can be tested and refuted. As a result, scientific theories are open to change or revision when new results contradict old ideas. Pseudoscience typically does not acknowledge or accept negative results and does not change or evolve.

85. How do quantitative and qualitative research differ?

ANSWER: The major difference between quantitative and qualitative research is the type of data they produce. Quantitative studies typically gather numerical scores that can be summarized, analyzed, and interpreted using

Copyright Cengage Learning. Powered by Cognero.

Research Methods for the Behavioral Sciences 7th edition Gravetter Test Bank

standard statistical procedures. In contrast, qualitative studies normally generate narrative reports of observations.

86. Outline and summarize the steps of the research process.

ANSWER: Find a research idea: Select a topic and search the literature for an unanswered question. Create a hypothesis. Define and measure your variables. Identify the participants or subjects for the study, decide how they will be selected, and plan for their ethical treatment. Select a research strategy and design. Conduct the study. Evaluate the data. Report the results. Refine or reformulate your research idea.

Copyright Cengage Learning. Powered by Cognero.

Research Methods for the Behavioral Sciences 7th edition Gravetter Test Bank