

1. Research is a type of systematic investigation that is empirical in nature and is designed to contribute to public knowledge.

- a. True
- b. False

ANSWER: True

DIFFICULTY: Easy

REFERENCES: 1.1 The Research Enterprise

KEYWORDS: Bloom's: Understand

2. Evolutionary epistemology is a branch of philosophy that proposes that ideas evolve through the process of natural selection.

- a. True
- b. False

ANSWER: True

DIFFICULTY: Easy

REFERENCES: 1.1 The Research Enterprise

KEYWORDS: Bloom's: Understand

3. The purpose of peer review is for other researchers to exactly repeat the procedures of an experiment to see whether they get the same results.

- a. True
- b. False

ANSWER: False

DIFFICULTY: Easy

REFERENCES: 1.2 Conceptualizing Research

KEYWORDS: Bloom's: Understand

4. Relational studies are designed primarily to document what is going on or what exists.

- a. True
- b. False

ANSWER: False

DIFFICULTY: Easy

REFERENCES: 1.3 The Language of Research

KEYWORDS: Bloom's: Understand

5. The theoretical nature of social sciences is related to developing, exploring, or testing the ideas that social researchers have about how the world operates.

- a. True
- b. False

ANSWER: True

DIFFICULTY: Easy

REFERENCES: 1.3 The Language of Research

KEYWORDS: Bloom's: Understand

6. A cross-sectional study is one that takes place at a single point in time.

- a. True
- b. False

ANSWER: True

DIFFICULTY: Easy

REFERENCES: 1.3 The Language of Research

KEYWORDS: Bloom's: Understand

7. A positive relationship between two variables may also be referred to as an inverse relationship.

- a. True
- b. False

ANSWER: False

DIFFICULTY: Easy

REFERENCES: 1.3 The Language of Research

KEYWORDS: Bloom's: Understand

8. An independent variable is what the experimenter (or nature) manipulates.

- a. True
- b. False

ANSWER: True

DIFFICULTY: Easy

REFERENCES: 1.3 The Language of Research

KEYWORDS: Bloom's: Understand

9. An hypothesis is a specific statement of prediction.

- a. True
- b. False

ANSWER: True

DIFFICULTY: Easy

REFERENCES: 1.3 The Language of Research

KEYWORDS: Bloom's: Understand

10. The degree to which conclusions reached about relationships in an experiment are reasonable is referred to as construct validity.

- a. True
- b. False

ANSWER: False

DIFFICULTY: Easy

REFERENCES: 1.5 The Validity of Research

KEYWORDS: Bloom's: Understand

Multiple Choice

11. Research is empirical in nature, meaning that it ____.

- a. is accessible to everyone
- b. involves systematic observation
- c. uses statistical procedures

- d. can be replicated

ANSWER:

b

DIFFICULTY:

Easy

REFERENCES:

1.1 The Research Enterprise

KEYWORDS:

Bloom's: Understand

12. The systematic effort to move research from initial discovery to practice is referred to as ____.

- a. translational research
- b. bench research
- c. basic research
- d. enterprise research

ANSWER:

a

DIFFICULTY:

Easy

REFERENCES:

1.1 The Research Enterprise

KEYWORDS:

Bloom's: Understand

13. The research-practice continuum starts with ____.

- a. applied research
- b. implementation research
- c. basic research
- d. policy research

ANSWER:

c

DIFFICULTY:

Easy

REFERENCES:

1.1 The Research Enterprise

KEYWORDS:

Bloom's: Understand

14. Valerie's state passed a law mandating a free public pre-kindergarten education for three- and four-year-old children, although school enrollment is not mandatory until age five, with kindergarten. She is tracking the school-readiness and reading-readiness scores of all children starting kindergarten to see how the children who are enrolled in the pre-K program do in comparison to those of similar background who do not attend. Valerie is conducting ____.

- a. applied research
- b. implementation research
- c. basic research
- d. policy research

ANSWER:

d

DIFFICULTY:

Moderate

REFERENCES:

1.1 The Research Enterprise

KEYWORDS:

Bloom's: Analyze

15. Dave's team has developed an intervention for use with high school students who are facing the unexpected death of a fellow student. This approach has been tested in a typical university community in the southern United States. Dave is now testing the intervention in urban areas and also has plans to test it in a number of other areas. Dave is conducting ____.

- a. applied research
- b. implementation research
- c. basic research
- d. policy research

ANSWER: b
DIFFICULTY: Moderate
REFERENCES: 1.1 The Research Enterprise
KEYWORDS: Bloom's: Analyze

16. Amir is aware that, at least in the laboratory, certain nutrients can help buffer research animals from the physiological damages associated with stress. He sets out to determine whether dietary supplements can do the same for people in a laboratory situation simulating real-life stresses. Amir's research is best described as ____.

- a. applied research
- b. implementation research
- c. basic research
- d. policy research

ANSWER: a
DIFFICULTY: Moderate
REFERENCES: 1.1 The Research Enterprise
KEYWORDS: Bloom's: Analyze

17. Aware of the controversy surrounding dietary treatments for autism spectrum disorders, Rebecca identifies relevant research and then uses statistical methods to combine the results of similar studies quantitatively in order to allow general conclusions to be made. Her work is best described as ____.

- a. multivariate analysis
- b. meta-analysis
- c. literature review
- d. systematic review

ANSWER: b
DIFFICULTY: Moderate
REFERENCES: 1.1 The Research Enterprise
KEYWORDS: Bloom's: Analyze

18. Elizabeth is a therapist at a residential treatment center for children and adolescents with eating disorders. She is aware that, in order for a treatment to be covered by insurance or other third-party payers, it must have a basis in research. This is commonly referred to as ____.

- a. data-driven decision making
- b. managed care triage
- c. state-of-the-art treatment
- d. evidence-based practice

ANSWER: d
DIFFICULTY: Moderate
REFERENCES: 1.1 The Research Enterprise
KEYWORDS: Bloom's: Analyze

19. Warren is reviewing the approaches that have been taken to the diagnosis and treatment of childhood schizophrenia over the past century. He notices that some ideas receive initial research support and become popular, generate additional research and, when not supported, seem to largely die off while others continue to be supported and become dominant in the field. This best illustrates ____.

- a. research synthesis
- b. evolutionary epistemology
- c. the research continuum

- d. evidence-based practice

ANSWER: b

DIFFICULTY: Moderate

REFERENCES: 1.1 The Research Enterprise

KEYWORDS: Bloom's: Analyze

20. Elsa periodically reviews documents on the National Institutes of Health website that describe issues the NIH wants to have addressed by researchers. Eliza is most likely looking at ____.

- a. meta-analyses
- b. peer reviews
- c. evidence-based guidelines
- d. requests for proposals

ANSWER: d

DIFFICULTY: Moderate

REFERENCES: 1.2 Conceptualizing Research

KEYWORDS: Bloom's: Analyze

21. In ____, individuals with expertise in the field critique a paper that has been submitted for publication.

- a. meta-analyses
- b. peer reviews
- c. evidence-based guidelines
- d. requests for proposals

ANSWER: b

DIFFICULTY: Easy

REFERENCES: 1.2 Conceptualizing Research

KEYWORDS: Bloom's: Understand

22. Social research is ____, meaning that much of it is concerned with developing, exploring, or testing the ideas that social researchers have about how the world operates.

- a. theoretical
- b. empirical
- c. probabilistic
- d. causal

ANSWER: a

DIFFICULTY: Easy

REFERENCES: 1.3 The Language of Research

KEYWORDS: Bloom's: Understand

23. Social research is ____, meaning it is based on observations and measurements of reality.

- a. theoretical
- b. empirical
- c. probabilistic
- d. causal

ANSWER: b

DIFFICULTY: Easy

REFERENCES: 1.3 The Language of Research

KEYWORDS:

Bloom's: Understand

24. Social research is ____, meaning it is interested in cause and effect relationships.

- a. theoretical
- b. empirical
- c. probabilistic
- d. causal

ANSWER:

d

DIFFICULTY:

Easy

REFERENCES:

1.3 The Language of Research

KEYWORDS:

Bloom's: Understand

25. Because there is often error associated with measurement and other aspects of research, social research is ____.

- a. theoretical
- b. empirical
- c. probabilistic
- d. causal

ANSWER:

c

DIFFICULTY:

Easy

REFERENCES:

1.3 The Language of Research

KEYWORDS:

Bloom's: Understand

26. Maris wants to document the coping methods of family caregivers for individuals with Alzheimer's disease as the dementia progresses. She is conducting ____ research.

- a. descriptive
- b. relational
- c. theoretical
- d. causal

ANSWER:

a

DIFFICULTY:

Moderate

REFERENCES:

1.3 The Language of Research

KEYWORDS:

Bloom's: Analyze

27. Selah is aware that playing certain types of computer games can have an impact on mood, and she wonders whether these effects might vary with age. She recruits a group of college-age adults, a group of middle-aged adults, and a group of elderly adults to test her hypothesis. Selah's research is best described as ____.

- a. longitudinal
- b. cross-sectional
- c. repeated measures
- d. time series

ANSWER:

b

DIFFICULTY:

Moderate

REFERENCES:

1.3 The Language of Research

KEYWORDS:

Bloom's: Analyze

28. What type of relationship occurs when two variables are synchronized?

- a. correlational
- b. cross-sectional
- c. causal
- d. probabilistic

ANSWER: a

DIFFICULTY: Easy

REFERENCES: 1.3 The Language of Research

KEYWORDS: Bloom's: Understand

29. What type of relationship occurs when two variables are synchronized and the levels of one variable affect the levels of the other?

- a. correlational
- b. cross-sectional
- c. causal
- d. probabilistic

ANSWER: c

DIFFICULTY: Easy

REFERENCES: 1.3 The Language of Research

KEYWORDS: Bloom's: Understand

30. A relationship in which higher levels of one variable are associated with higher levels of another is best described as ____.

- a. positive
- b. negative
- c. curvilinear
- d. accelerated

ANSWER: a

DIFFICULTY: Easy

REFERENCES: 1.3 The Language of Research

KEYWORDS: Bloom's: Understand

31. A relationship in which higher levels of one variable are associated with lower levels of another is best described as ____.

- a. positive
- b. negative
- c. curvilinear
- d. accelerated

ANSWER: b

DIFFICULTY: Easy

REFERENCES: 1.3 The Language of Research

KEYWORDS: Bloom's: Understand

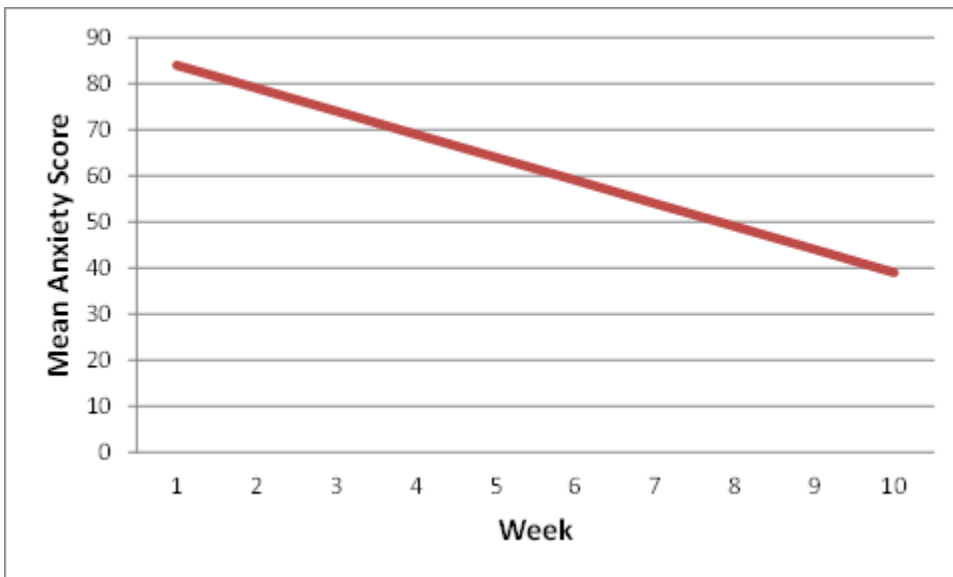


Figure TB 1-1

32. What type of relationship is shown in the accompanying figure?

- a. no relationship
- b. negative relationship
- c. positive relationship
- d. curvilinear relationship

ANSWER:

b

DIFFICULTY:

Moderate

REFERENCES:

1.3 The Language of Research

PREFACE NAME:

Figure TB 1-1

KEYWORDS:

Bloom's: Analyze

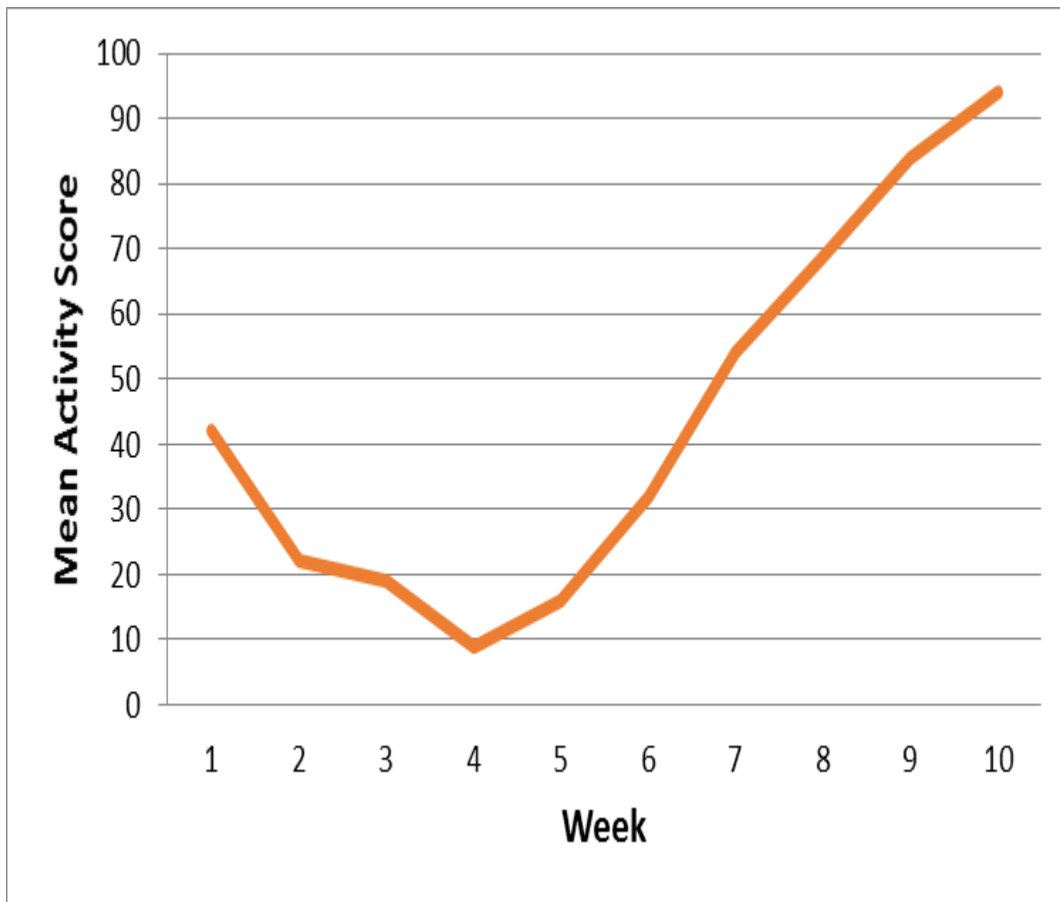


Figure TB 1-2

33. What type of relationship is shown in the accompanying figure?

- a. no relationship
- b. negative relationship
- c. positive relationship
- d. curvilinear relationship

ANSWER:

d

DIFFICULTY:

Moderate

REFERENCES:

1.3 The Language of Research

PREFACE NAME:

Figure TB 1-2

KEYWORDS:

Bloom's: Analyze

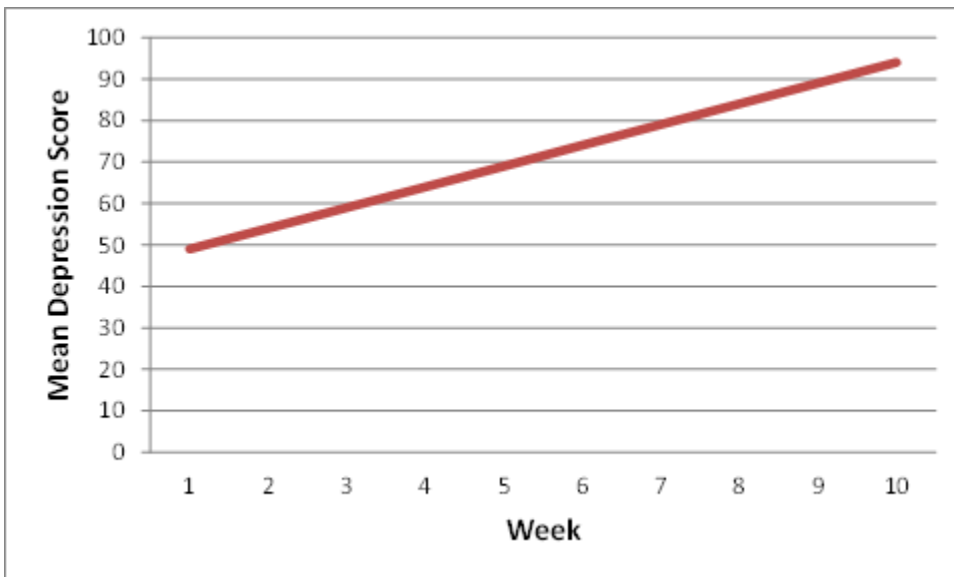


Figure TB 1-3

34. What type of relationship is shown in the accompanying figure?

- a. no relationship
- b. negative relationship
- c. positive relationship
- d. curvilinear relationship

ANSWER:

c

DIFFICULTY:

Moderate

REFERENCES:

1.3 The Language of Research

PREFACE NAME:

Figure TB 1-3

KEYWORDS:

Bloom's: Analyze

35. The "entity" being studied in research, whether a neuron, a person, a class, or a town, is best referred to as a(n) ____.

- a. participant
- b. unit of analysis
- c. outcome
- d. observational target

ANSWER:

b

DIFFICULTY:

Easy

REFERENCES:

1.3 The Language of Research

KEYWORDS:

Bloom's: Understand

36. When the attributes for a variable are such that one, and only one, is applicable at a time, the attributes are said to be ____.

- a. mutually exclusive
- b. quantitative
- c. qualitative
- d. exhaustive

ANSWER:

a

DIFFICULTY:

Easy

REFERENCES:

1.3 The Language of Research

KEYWORDS:

Bloom's: Understand

37. When all possible answerable responses are included as possible attributes for a variable, the list of attributes is said to be ____.

- a. mutually exclusive
- b. quantitative
- c. qualitative
- d. exhaustive

ANSWER: d

DIFFICULTY: Easy

REFERENCES: 1.3 The Language of Research

KEYWORDS: Bloom's: Understand

38. The ____ is a specific statement of prediction that usually states there is no effect of the experimental manipulation.

- a. null hypothesis
- b. predictive hypothesis
- c. alternative hypothesis
- d. theoretical hypothesis

ANSWER: a

DIFFICULTY: Easy

REFERENCES: 1.3 The Language of Research

KEYWORDS: Bloom's: Understand

39. The ____ is a specific statement of prediction that usually states what is expected to happen in a study.

- a. null hypothesis
- b. predictive hypothesis
- c. alternative hypothesis
- d. theoretical hypothesis

ANSWER: c

DIFFICULTY: Easy

REFERENCES: 1.3 The Language of Research

KEYWORDS: Bloom's: Understand

40. Reasoning that moves from specific observations to broader generalizations is referred to as ____.

- a. inductive
- b. fallacious
- c. specious
- d. deductive

ANSWER: a

DIFFICULTY: Easy

REFERENCES: 1.3 The Language of Research

KEYWORDS: Bloom's: Understand

41. Reasoning that moves from the more general to the more specific is referred to as ____.

- a. inductive
- b. fallacious

- c. specious
- d. deductive

ANSWER:

d

DIFFICULTY:

Easy

REFERENCES:

1.3 The Language of Research

KEYWORDS:

Bloom's: Understand

42. Bonita is participating in a longitudinal study that began when she was only two years old. Now in her late 20s, Bonita has undergone a series of cognitive tests every six months for more than 25 years. The study in which Bonita is participating is best described as a(n) ____ study.

- a. repeated measures
- b. cross sectional
- c. time series
- d. independent measures

ANSWER:

c

DIFFICULTY:

Moderate

REFERENCES:

1.3 The Language of Research

KEYWORDS:

Bloom's: Analyze

43. The central issue being addressed in a study is called the ____.

- a. null hypothesis
- b. research question
- c. theoretical construct
- d. operationalization

ANSWER:

b

DIFFICULTY:

Easy

REFERENCES:

1.4 The Structure of Research

KEYWORDS:

Bloom's: Understand

44. The act of translating a construct into its manifestation is called ____.

- a. hypothesizing
- b. statistical analysis
- c. theorizing
- d. operationalization

ANSWER:

d

DIFFICULTY:

Easy

REFERENCES:

1.4 The Structure of Research

KEYWORDS:

Bloom's: Understand

45. Drew believes that individuals with higher levels of social anxiety will be more likely to spend more time on social media. He defines social anxiety levels as scores on a common test of social anxiety. In defining it as a test score, Drew has ____ social anxiety.

- a. hypothesized about
- b. analyzed
- c. theorized about
- d. operationalized

ANSWER:

d

DIFFICULTY: Easy
REFERENCES: 1.4 The Structure of Research
KEYWORDS: Bloom's: Analyze

46. In causal studies, the interest is in the effects of some cause on one or more ____.

- a. treatments
- b. constructs
- c. operations
- d. outcomes

ANSWER: d

DIFFICULTY: Easy
REFERENCES: 1.4 The Structure of Research
KEYWORDS: Bloom's: Understand

47. What type of validity is most concerned with whether there is a relationship between the variables?

- a. conclusion
- b. construct
- c. internal
- d. external

ANSWER: a

DIFFICULTY: Easy
REFERENCES: 1.5 The Validity of Research
KEYWORDS: Bloom's: Understand

48. What type of validity is most concerned with whether there is a causal relationship?

- a. conclusion
- b. construct
- c. internal
- d. external

ANSWER: c

DIFFICULTY: Easy
REFERENCES: 1.5 The Validity of Research
KEYWORDS: Bloom's: Understand

49. What type of validity is most concerned with whether the results can be generalized to other persons, places, and times?

- a. conclusion
- b. construct
- c. internal
- d. external

ANSWER: d

DIFFICULTY: Easy
REFERENCES: 1.5 The Validity of Research
KEYWORDS: Bloom's: Understand

50. Chloe tests an intervention for kindergartners who become upset and refuse to attend school. She has found it works

well in the small rural school for her first study and is now testing it in other settings such as the suburbs and in inner-city schools. In doing so, she is addressing ____ validity.

- a. conclusion
- b. construct
- c. internal
- d. external

ANSWER: d
DIFFICULTY: Difficult
REFERENCES: The Validity of Research
KEYWORDS: Bloom's: Analyze

Completion

51. The _____ is the macro-level effort to accumulate knowledge across multiple empirical systematic public research projects.

ANSWER: research enterprise
DIFFICULTY: Easy
REFERENCES: 1.1 The Research Enterprise
KEYWORDS: Bloom's: Understand

52. A(n) _____ uses statistical methods to combine the results of similar studies quantitatively in order to allow general conclusions to be made.

ANSWER: meta-analysis
DIFFICULTY: Easy
REFERENCES: 1.1 The Research Enterprise
KEYWORDS: Bloom's: Understand

53. A(n) _____ focuses on a specific question or issue and uses specific preplanned methods to identify, select, assess, and summarize the findings of multiple research studies.

ANSWER: systematic review
DIFFICULTY: Easy
REFERENCES: 1.1 The Research Enterprise
KEYWORDS: Bloom's: Understand

54. A(n) _____ is the result of a systematic process that leads to a specific set of research-based recommendations for practice that usually includes some estimates of how strong the evidence is for each recommendation.

ANSWER: guideline
DIFFICULTY: Easy
REFERENCES: 1.1 The Research Enterprise
KEYWORDS: Bloom's: Understand

55. The branch of philosophy that holds that ideas evolve through the process of natural selection is _____.

ANSWER: evolutionary epistemology
DIFFICULTY: Easy
REFERENCES: 1.1 The Research Enterprise
KEYWORDS: Bloom's: Understand

56. Documents published by government agencies and some companies that describe some problem that the agency would like researchers to address are called _____.

ANSWER: requests for proposals

DIFFICULTY: Easy

REFERENCES: 1.2 Conceptualizing Research

KEYWORDS: Bloom's: Understand

57. A(n) _____ is a systematic compilation and written summary of all of the literature published in scientific journals that is related to a research topic of interest.

ANSWER: literature review

DIFFICULTY: Easy

REFERENCES: 1.2 Conceptualizing Research

KEYWORDS: Bloom's: Understand

58. A(n) _____ hypothesis simply predicts that the experimental and control groups will differ, but does not predict the direction of the difference.

ANSWER:

two-tailed

two tailed

DIFFICULTY: Easy

REFERENCES: 1.3 The Language of Research

KEYWORDS: Bloom's: Understand

59. Top-down reasoning that works from the more general to the more specific is referred to as _____ reasoning.

ANSWER: deductive

DIFFICULTY: Easy

REFERENCES: 1.3 The Language of Research

KEYWORDS: Bloom's: Understand

60. Studies designed primarily to document what is going on or what exists are called _____ studies.

ANSWER: descriptive

DIFFICULTY: Easy

REFERENCES: 1.3 The Language of Research

KEYWORDS: Bloom's: Understand

61. Studies designed to determine whether one or more treatment variables affects one or more outcome variables are called _____ studies.

ANSWER: causal

DIFFICULTY: Easy

REFERENCES: 1.3 The Language of Research

KEYWORDS: Bloom's: Understand

62. Bruce is conducting research about family interactions and wants to include both individual-level data and family-level data. He is most likely using _____ modeling.

ANSWER: hierarchical

DIFFICULTY: Easy

REFERENCES:

1.3 The Language of Research

KEYWORDS:

Bloom's: Understand

63. The abstract idea or theory of what the outcome is in a cause-effect relationship you are investigating is referred to as the _____.

ANSWER: effect construct

DIFFICULTY: Easy

REFERENCES: 1.5 The Validity of Research

KEYWORDS: Bloom's: Understand

64. The term used to discuss the quality of various conclusions reached based on a research project is _____.

ANSWER: validity

DIFFICULTY: Easy

REFERENCES: 1.5 The Validity of Research

KEYWORDS: Bloom's: Understand

65. The degree to which the conclusions in a study would hold for other persons in other places and at other times is referred to as _____.

ANSWER: external validity

DIFFICULTY: Easy

REFERENCES: 1.5 The Validity of Research

KEYWORDS: Bloom's: Understand

Essay

66. Draw and discuss the research-practice continuum, providing an example for each level.

ANSWER: We can think of the research enterprise as encompassing a research-practice continuum within which translation occurs. In the course of moving through this continuum, it is likely that many individual research projects will be conducted. Some of these are what might be called basic research and are designed to generate discoveries and to understand their mechanisms better. For discoveries that relate to humans, this is usually followed by a series of applied research projects where the discovery is tested under increasingly controlled conditions with humans. If a discovery survives this applied research testing, there is usually a process of seeing how well it can be implemented in and disseminated to a broad range of contexts that extend beyond the original controlled studies. This is sometimes referred to as implementation and dissemination research. Ultimately, many such discoveries are assessed for the impacts they have broadly on society, what might be termed impact research. Sometimes discoveries lead to the development of new policies that are investigated with policy research in the broader population.

It is assumed that different discoveries take different pathways through this continuum. Some take longer to go through one stage or another. The bidirectional arrow in the figure is meant to convey that the translational process works in both directions. Sometimes insights from practitioners and policy makers can inform basic and applied researchers and improve their ability to transform their discoveries to better anticipate the real-world contexts that they will eventually need to be implemented in.

DIFFICULTY: Moderate

REFERENCES: 1.1 The Research Enterprise

KEYWORDS: Bloom's: Understand

67. What is evidence-based practice and why does it matter?

ANSWER: The interpositioning of a synthesis and guideline process in the middle of the research-practice continuum has transformed virtually every area of applied social research practice in our society. The term that is most associated with this change is evidence-based practice. It originated first in medicine as evidence-based medicine and then rapidly moved into other fields. Virtually every area of social practice today has an effort to integrate research and practice in this type of way. Evidence-based practice (EBP) is a movement designed to encourage or require practitioners to employ practices that are based on research evidence as reflected in research syntheses or practice guidelines. The EBP movement represents a major attempt of the research enterprise to achieve a better integration of research and practice.

DIFFICULTY: Moderate

REFERENCES: 1.1 The Research Enterprise

KEYWORDS: Bloom's: Understand

68. Define the term of research synthesis and describe the two major types.

ANSWER: A research synthesis is a systematic study of multiple prior research projects that address the same research question or topic and summarize the results in a manner that can be used by practitioners. There are two major types of research syntheses. A meta-analysis uses statistical methods to combine the results of similar studies quantitatively in order to allow general conclusions to be made. A systematic review is a research synthesis approach that focuses on a specific question or issue and uses specific preplanned methods to identify, select, assess, and summarize the findings of multiple research studies. It may or may not include a meta-analysis (a quantitative synthesis of results). Often, a systematic review involves a panel of experts who discuss the research literature and reach conclusions about how well a discovery works to address a problem or issue. So, while a meta-analysis is always a quantitative synthesis, a systematic review may be a judgmental expert-driven synthesis, a meta-analysis, or both.

DIFFICULTY: Moderate

REFERENCES: 1.1 The Research Enterprise

KEYWORDS: Bloom's: Understand

69. Define and provide examples of descriptive, relational, and causal studies.

ANSWER: Descriptive studies are designed primarily to document what is going on or what exists. Public opinion polls that seek to describe the proportion of people who hold various opinions are primarily descriptive in nature. For instance, if you want to know what percentage of the population would vote for a Democrat or a Republican in the next presidential election, you are simply interested in describing something.

Relational studies look at the relationships between two or more variables. A public opinion poll that compares the proportion of males and females who say they would vote for a Democratic or a Republican candidate in the next presidential election is essentially studying the relationship between gender and voting preference.

Causal studies are designed to determine whether one or more variables (for example, a program or treatment variable) causes or affects one or more outcome variables. If you performed a public opinion poll to try to determine whether a recent political advertising campaign changed voter preferences, you would essentially be studying whether the campaign (cause) changed the proportion of voters who would vote Democratic or Republican (effect).

DIFFICULTY: Moderate

REFERENCES: 1.3 The Language of Research

KEYWORDS: Bloom's: Understand

70. Identify and describe the four types of validity described in your text.

ANSWER: Conclusion Validity: In this study, is there a relationship between the two variables? For the example

at hand, this question might be worded: in this study, is there a relationship between the website and knowledge of course material? There are several conclusions or inferences you might draw to answer such a question. You could, for example, conclude that there is a relationship. You might conclude that there is a positive relationship. You might infer that there is no relationship. When you assess the validity of each of these conclusions or inferences, you are addressing conclusion validity.

Internal Validity: Assuming that there is a relationship in this study, is the relationship a causal one? Just because you find that use of the website and knowledge are correlated, you can't necessarily assume that the website use causes the knowledge. Both could, for example, be caused by the same factor. For instance, it may be that wealthier students, who have greater resources, would be more likely to have access to a website and would excel on objective tests. When you want to make a claim that your program or treatment caused the outcomes in your study, and not something else, you are assessing the validity of a causal assertion and addressing internal validity.

Construct Validity: Assuming that there is a causal relationship in this study, can you claim that the program reflected well your construct of the program and that your measure reflected well your idea of the construct of the measure? In simpler terms, did you implement the program you intended to implement, and did you measure the outcome you wanted to measure? In yet other terms, did you operationalize well the ideas of the cause and the effect? Is the website what you intended it would be? Does it look like and work the way you theoretically imagined it would? Does it have the content you thought it should? When your research is over, you would like to be able to conclude that you did a credible job of operationalizing your constructs—that you can provide evidence for the construct validity of such a conclusion.

External Validity: Assuming that there is a causal relationship in this study between the constructs of the cause and the effect, can you generalize this effect to other persons, places, or times? Would a virtual classroom work with different target groups at different times, on different subject matters? You are likely to make some claims that your research findings have implications for other groups and individuals in other settings and at other times. When you do, you need to address the external validity of these claims.

DIFFICULTY: Moderate
REFERENCES: 1.5 The Validity of Research
KEYWORDS: Bloom's: Understand