

## Chapter 2: Goals and Methods of Psychology

### Multiple Choice Questions

- Chapter 2 begins with an Are You Equipped? exercise describing research in which a movie theater owner flashed “Eat Popcorn” and “Drink Coca-Cola” at an exposure rate of 1/3,000 per second on the screen during the presentation of a movie. Which statement below summarizes the owner’s original findings that he shared with others?
  - There was no change in popcorn and soda sales.
  - There was a 50% increase in soda sales and a smaller increase in popcorn sales.
  - There was a 50% increase in popcorn sales and a smaller increase in soda sales.
  - There was a 50% increase in popcorn sales and 20% in soda sales.
- Chapter 2 begins with an Are You Equipped? exercise describing research in which a movie theater owner flashed “Eat Popcorn” and “Drink Coca-Cola” at an exposure rate of 1/3,000 per second on the screen during the presentation of a movie. The owner originally reported an increase in popcorn and sodas sales for this method of advertisement. However, later the owner admitted to falsifying the data. Which statement below *best* describes why he admitted to falsifying the data?
  - because through the process of reporting and replication other researchers called the results into question
  - because the owner was ready to close his advertising business and did not want people to bother him
  - because through the process of hypothesis formation and collection of data other researchers called the results into question
  - because he did not use the scientific method
- Chapter 2 begins with an Are You Equipped? exercise describing research in which a movie theater owner flashed “Eat Popcorn” and “Drink Coca-Cola” at an exposure rate of 1/3,000 per second on the screen during the presentation of a movie. This study sparked interest in which topic area in psychology?
  - subliminal perception
  - monocular perception
  - personal introspection
  - personal perception
- Which of the following is a goal of psychological research?
  - describe
  - explain
  - predict
  - all of the above
- Which of the following is a goal of psychological research?
  - explain
  - predict
  - influence
  - all of the above
- Which of the following is not a goal of psychological research?
  - explain
  - predict
  - cure
  - influence
- Which of the following is not a goal of psychological research?
  - to describe behavior
  - to provide therapy
  - to predict future behaviors
  - to influence behaviors

8. Which of the following is an underlying goal for all research?
- a. describe
  - b. explain
  - c. predict
  - d. influence
9. Which of the following is the *first* goal of psychological research?
- a. describe
  - b. explain
  - c. predict
  - d. influence
10. When you ask yourself the question, "What is going on here?" you are conducting research for which goal of psychology?
- a. describe
  - b. explain
  - c. predict
  - d. influence
11. When research is conducted to determine the number of characters within a typical text messages, the goal of the research is to \_\_\_\_\_.
- a. explain behavior.
  - b. describe behavior.
  - c. predict behavior.
  - d. influence behavior
12. Which of the following is the *second* goal of psychological research?
- a. describe
  - b. explain
  - c. predict
  - d. influence
13. When you ask yourself the question, "Why is this happening" you are conducting research for which goal of psychology?
- a. describe
  - b. explain
  - c. predict
  - d. influence
14. When you ask yourself the question, "What are the socio-emotional aspects of text messaging" you are conducting research for which goal of psychology?
- a. describe
  - b. explain
  - c. predict
  - d. influence
15. Which of the following is the *third* goal of psychological research?
- a. predict
  - b. explain
  - c. influence
  - d. describe
16. When you ask yourself the question, "Where will this behavior or event be exhibited" you are conducting research for which goal of psychology?
- a. predict
  - b. explain
  - c. influence
  - d. describe
17. When a researcher examines how text messaging is used to terminate romantic relationships, which goal of psychology is her or she using?
- a. influence
  - b. describe
  - c. predict
  - d. explain

18. What is the *fourth* goal of psychological research?
- a. influence
  - b. describe
  - c. predict
  - d. explain
19. When you ask yourself, “How can I enhance or reduce the exhibited behavior?” you are conducting research for which goal of psychology?
- a. describe
  - b. predict
  - c. explain
  - d. influence
20. When a researcher examines how commercials can increase or decrease text messaging usage, which goal of psychology is her or she using?
- a. predict
  - b. explain
  - c. influence
  - d. describe
21. \_\_\_\_\_ research is conducted to further the collective knowledge about a topic within a field of study.
- a. Basic
  - b. Psychological
  - c. Applied
  - d. Behavioral
22. \_\_\_\_\_ research is conducted to solve a practical problem within a field of study.
- a. Basic
  - b. Psychological
  - c. Applied
  - d. Behavioral
23. The first three goals of psychological research can be categorized as \_\_\_\_\_ research.
- a. basic
  - b. psychological
  - c. applied
  - d. behavioral
24. The last goal of psychological research can be categorized as \_\_\_\_\_ research.
- a. basic
  - b. psychological
  - c. applied
  - d. behavioral
25. Think about how researchers would investigate the topic of depression. For the *first* goal, what would be the research question?
- a. What is depression?
  - b. Why do people get depressed?
  - c. When or where will people get depressed?
  - d. How can I reduce depression?
26. Think about how researchers would investigate the topic of depression. For the *second* goal, what would be the research question?
- a. What is depression?
  - b. Why do people get depressed?
  - c. When or where will people get depressed?
  - d. How can I reduce depression?
27. Think about how researchers would investigate the topic of depression. For the *third* goal, what would be the research question?

- a. What is depression?
- b. Why do people get depressed?
- c. When or where will people get depressed?
- d. How can I reduce depression?

28. Think about how researchers would investigate the topic of depression. For the *fourth* goal, what would be the research question?

- a. What is depression?
- b. Why do people get depressed?
- c. When or where will people get depressed?
- d. How can I reduce depression?

29. There are \_\_\_\_\_ steps in the scientific method that psychologists use when conducting research.

- a. four
- b. five
- c. six
- d. seven

30. The first step in the scientific method is known as \_\_\_\_\_.

- a. hypothesis formation.
- b. problem identification.
- c. problem formation.
- d. hypothesis identification.

31. The \_\_\_\_\_ step in the scientific method involves an initial review of the literature.

- a. first
- b. second
- c. third
- d. fourth

32. The term *question identification* is equivalent to \_\_\_\_\_.

- a. hypothesis identification.
- b. problem identification.
- c. hypothesis formation.
- d. problem formation.

33. The second step in the scientific method is to \_\_\_\_\_.

- a. conceptualize a problem.
- b. identify a problem.
- c. formulate a hypothesis.
- d. collect data.

34. The definition of a hypothesis as an educated guess is \_\_\_\_\_.

- a. not sufficient.
- b. a good working definition.
- c. not a popular definition.
- d. none of the above.

35. \_\_\_\_\_ is a statement about the relationship between variables.

- a. Categorization
- b. Association
- c. Correlation
- d. Hypothesis

36. The hypothesis is used to guide the next step in the scientific method, \_\_\_\_\_.

- a. collection of data.
- b. analysis of data.
- c. drawing conclusions.
- d. reporting of findings.

37. At which step do researchers sometimes reevaluate the hypothesis and research design?

- a. data collection
- b. analysis of data
- c. conclusions
- d. reporting of findings

38. Which of the following steps is often overlooked but is very important to the scientific method?

- a. data collection
- b. analysis of data
- c. conclusions
- d. reporting of findings

39. \_\_\_\_\_ occurs when a research experiment or study is reproduced using the exact same methodology and procedure.

- a. Imitation
- b. Duplication
- c. Replication
- d. None of the above

40. Which of the following statements is most accurate?

- a. Researchers prefer to publish in specialty journals.
- b. Researchers prefer to publish in administratively reviewed journals.
- c. Researchers prefer to publish in journals with a speedy turnaround.
- d. Researchers prefer to publish in peer-reviewed journals.

41. A researcher is interested in determining if the racial makeup of an audience influences perceptions of humor. The researcher has conducted a review of previous research and has developed a hypothesis that audience racial makeup will influence perceptions of humor. Using the scientific method, what is the next step that needs to be taken by the researcher?

- a. step number three
- b. step number four
- c. step number five
- d. step number six

42. A group of undergraduate students are investigating whether the skills acquired when playing a real-world game are helpful when a simulated version of it is played as a videogame. The undergraduate students have designed a study and collected their data. Using the scientific method, what is the next step that needs to be taken by the researcher?

- a. step number three
- b. step number four
- c. step number five
- d. step number six

43. A \_\_\_\_\_ is an overarching principle that explains separate research findings in an area.

- a. premise
- b. thesis
- c. supposition
- d. theory

44. Cox et al. (2010) developed a hypothesis that graphical representation of risk statistics regarding HPV and cervical cancer in young women would increase mothers' intentions to have their daughters vaccinated. What step in the scientific method is this?

- a. step number 1
- b. step number 2
- c. step number 3
- d. step number 4

45. Cox et al. (2010) developed a hypothesis that graphical representation of risk statistics regarding HPV and cervical cancer in young women would increase mothers' intentions to have their daughters vaccinated. What step in the scientific method would come next?

- a. step number 1
- b. step number 2
- c. step number 3
- d. step number 4

46. Which of the following statements is true about the scientific method?

- a. It was developed by psychologists.
- b. It was developed recently to study areas of interest in social sciences.
- c. It can only be used by biologists.
- d. It was borrowed over a hundred years ago.

47. Which of the following is an example of a testable research hypothesis?

- a. Religious groups are moral.
- b. Religious groups are immoral.
- c. Members of religious groups consider themselves to be moral.
- d. Both A and B

48. Which of the following examples from the chapter illustrates how Goal 4 was covered in the chapter?

- a. creation of police lineups
- b. subliminal advertising
- c. both A and B
- d. none of the above

49. Which of the following statements is true?

- a. non-significant results are likely to be published
- b. significant results are likely to be published
- c. significant results are due to chance
- d. non-significant results are due to poor methodology

50. Which of the following goals was *not* covered in this chapter?

- a. Goal 1
- b. Goal 2
- c. Goal 3
- d. Goal 5

## True False Questions

51. Chapter 2 begins with an Are You Equipped? exercise describing research in which a movie theater owner flashed “Eat Popcorn” and “Drink Coca-Cola” during the presentation of a movie.
52. Personal introspection allowed the movie owner to increase soda and popcorn sales.
53. The steps of the scientific method allowed the scientific community to question the movie owner’s research.
54. The goals of psychological research are to: describe, explain, predict, and influence behavior.
55. The first goal of psychological research is to explain behavior.
56. The second goal of psychological research is to describe behavior.
57. The first three goals of psychological research can be categorized as applied research.
58. The last goal of psychological research can be categorized as basic research.
59. Basic research is conducted to further the collective knowledge about a topic within a field of study.
60. Applied research is conducted to solve a practical problem within a field of study.
61. The first goal of psychological research asks the question, “What is going on here?”
62. The second goal of psychological research asks the question, “Where will this behavior be exhibited?”
63. The last goal of psychological research asks the question, “How can I enhance or reduce the exhibited behavior or process?”
64. Research investigating the linguistic advantages of text messaging is conducted with the second goal of psychological research in mind.
65. Psychologists conduct research to influence behavior of others.
66. There are six steps in the scientific method.
67. There are four steps in the scientific method.
68. The first step in the scientific method is problem identification.
69. The first step in the scientific method is question identification.
70. The first step in the scientific method is hypothesis formation.
71. A hypothesis is an educated guess.
72. The hypothesis is derived from the first step.
73. The hypothesis is derived from the second step.
74. Replication is not a required component of the scientific method.
75. Researchers prefer to publish in peer-reviewed journals.
76. Researchers are likely to have non-significant results published.
77. A hypothesis has to be worded in such a way that it can be tested.
78. This statement, “Religious groups are moral” is an example of a testable hypothesis.
79. This statement, “Members of a religious group consider themselves to be moral” is a testable hypothesis.
80. During data analysis, researchers frequently revisit the hypothesis formation stage.
81. During the conclusion step, researchers frequently revisit the hypothesis formation stage.
82. The remainder of the textbook will provide you with the necessary tools to engage in the first three steps of the scientific method.
83. The coverage of the topics basic and applied research is associated with APA Goal 1.
84. This chapter failed to include critical thinking exercises.

## Short Answer Questions

85. Identify the four goals of psychological research.
86. Compare and contrast basic and applied research.

87. Think about how psychologists would investigate the topic of depression using the goals of psychological research. For the first goal, what would be the research question? Explain what the researcher would hope to accomplish in terms of information gained on the topic of depression.
88. Think about how psychologists would investigate the topic of depression using the goals of psychological research. For the second goal, what would be the research question? Explain what the researcher would hope to accomplish in terms of information gained on the topic of depression.
89. Think about how psychologists would investigate the topic of depression using the goals of psychological research. For the third goal, what would be the research question? Explain what the researcher would hope to accomplish in terms of information gained on the topic of depression.
90. Think about how psychologists would investigate the topic of depression using the goals of psychological research. For the fourth goal, what would be the research question? Explain what the researcher would hope to accomplish in terms of information gained on the topic of depression.
91. Read the abstract below. After reading the abstract, state whether the research was basic or applied in nature. Be sure to define the terms in your response.

Many of the phenomena underlying shape recognition can be derived from the greater sensitivity to nonaccidental properties of an image (e.g., whether a contour is straight or curved), which are invariant to orientation in depth, than to the metric properties of an image (e.g., a contour's degree of curvature), which can vary with orientation. What enables this sensitivity? One explanation is that it derives from people's immersion in a manufactured world in which simple, regular shapes distinguished by nonaccidental properties abound (e.g., a can, a brick), and toddlers are encouraged to play with toy shape sorters. This report provides evidence against this explanation. The Himba, a seminomadic people living in a remote region of northwestern Namibia where there is little exposure to regular, simple artifacts, were virtually identical to Western observers in their greater sensitivity to nonaccidental properties than to metric properties of simple shapes.

- Biederman, I., Yue, X., & Davidoff, J. (2009). Representation of shape in individuals from a culture with minimal exposure to regular, simple artifacts: Sensitivity to nonaccidental versus metric properties. *Psychological Science, 20*, 1437–1442.

92. Read the abstract below. After reading the abstract, state whether the research was basic or applied in nature. Be sure to define the terms in your response.

Working memory storage capacity is important because cognitive tasks can be completed only with sufficient ability to hold information as it is processed. The ability to repeat information depends on task demands but can be distinguished from a more constant, underlying mechanism: a central memory store limited to 3 to 5 meaningful items for young adults. I discuss why this central limit is important, how it can be observed, how it differs among individuals, and why it may exist.

- Cowan, N. (2010). The magical mystery four: How is working memory capacity limited, and why? *Current Directions in Psychological Science, 19*, 51–57.

93. Read the abstract below. After reading the abstract, state whether the research was basic or applied in nature. Be sure to define the terms in your response.

In many everyday situations, speed is of the essence. However, fast decisions typically mean more mistakes. To this day, it remains unknown whether reaction times can be reduced with appropriate training, within one individual, across a range of tasks, and without compromising accuracy. Here we review evidence that the very act of playing action video games significantly reduces reaction times without sacrificing accuracy. Critically, this increase in speed is observed across various tasks beyond game situations. Video gaming may therefore provide an efficient training regimen to induce a general speeding of perceptual reaction times without decreases in accuracy of performance.

-Dye, M. W. G., Green, C. S., & Bavelier, D. (2009). Increasing speed of processing with action video games. *Current Directions in Psychological Science, 18*, 321–326.

94. Read the abstract below. After reading the abstract, state whether the research was basic or applied in nature. Be sure to define the terms in your response.



Young boys who did not own video games were promised a video-game system and child-appropriate games in exchange for participating in an “ongoing study of child development.” After baseline assessment of boys’ academic achievement and parent and teacher-reported behavior, boys were randomly assigned to receive the video-game system immediately or to receive the video-game system after follow-up assessment, 4 months later. Boys who received the system immediately spent more time playing video games and less time engaged in afterschool academic activities than comparison children. Boys who received the system immediately also had lower reading and writing scores and greater teacher-reported academic problems at follow-up than comparison children. Amount of video-game play mediated the relationship between video-game ownership and academic outcomes. Results provide experimental evidence that video games may displace after-school activities that have educational value and may interfere with the development of reading and writing skills in some children.

-Weis, R., & Cerankosky, B. C. (2010). Effects of video-game ownership on young boys’ academic and behavioral functioning: A randomized, controlled study. *Psychological Science, 21*, 463–470.

95. Read the abstract below. After reading the abstract, state whether the research was basic or applied in nature. Be sure to define the terms in your response.
- In their descriptions, eyewitnesses often refer to a culprit’s distinctive facial features. However, in a police lineup, selecting the only member with the described distinctive feature is unfair to the suspect and provides the police with little further information. For fair and informative lineups, the distinctive feature should be either replicated across foils or concealed on the target. In the present experiments, replication produced more correct identifications in target-present lineups—without increasing the incorrect identification of foils in target-absent lineups— than did concealment. This pattern, and only this pattern, is predicted by the hybrid-similarity model of recognition.
- Zarkadi, T., Wade, K. A., & Stewart, N. (2009). Creating fair lineups for suspects with distinctive features. *Psychological Science, 20*, 1448–1453.
96. Identify the steps in the scientific method.
97. A researcher is interested in determining if the racial makeup of an audience influences perceptions of humor. The researcher has conducted a review of previous research and has developed a hypothesis that audience racial makeup will influence perceptions of humor. Using the scientific method, what is the next step that needs to be taken by the researcher?
98. A group of undergraduate students are investigating whether the skills acquired when playing a real-world game are helpful when a simulated version of it is played as a videogame. The undergraduate students have designed a study and collected their data. Using the scientific method, what is the next step that needs to be taken by the researcher?
99. Give an example of how Goal 1: Knowledge Base of Psychology was covered in the chapter?
100. Give an example of how Goal 3: Critical Thinking Skills in Psychology was covered in the chapter?

Answer Key: Chapter 2

1. B
2. A
3. A
4. D
5. D
6. C
7. B
8. A
9. A
10. A
11. B
12. B
13. B
14. B
15. A
16. A
17. C
18. A
19. D
20. C
21. A
22. C
23. A
24. C
25. A
26. B
27. C
28. D
29. C
30. B
31. A
32. B
33. C
34. A
35. D
36. A
37. C
38. D
39. C
40. D
41. A
42. B
43. D
44. B
45. C
46. D
47. C
48. C
49. B
50. D
51. T
52. F
53. T
54. T
55. F
56. F
57. F
58. F
59. T
60. T
61. T
62. F
63. T
64. T
65. T
66. T
67. F
68. T
69. T
70. F
71. F
72. T
73. F
74. F
75. T
76. F
77. T
78. F
79. T
80. F
81. T
82. T
83. T
84. F

