**EXAM: CHAPTER 1**

**Thinking Critically With**

**Psychological Science**

1. The perception that psychological research findings merely verify our common-sense understanding is most clearly facilitated by:

a. illusory correlations.

b. the hindsight bias.

c. the false consensus effect.

d. the placebo effect.

2. Jamie and Lynn were sure that they had answered most of the multiple-choice questions correctly because “they simply required common sense.” However, they each received a 60% on the exam. This best illustrates:

a. illusory correlation.

b. overconfidence.

c. random assignment.

d. the false consensus effect.

e. the hindsight bias.

3. The two most fundamental characteristics of the scientific attitude are:

a. pride and enthusiasm.

b. ingenuity and practicality.

c. creativity and patience.

d. skepticism and humility.

4. The scientific attitude requires an open-minded humility because it involves a willingness to:

a. perceive order in random events.

b. reject any ideas that can’t be scientifically tested.

c. recognize the errors in our own theories.

d. respect any religious beliefs that contradict our own.

5. The biases and errors of people’s everyday judgments illustrate the need for:

a. critical thinking.

b. curious skepticism.

c. open-minded humility.

d. all of the above.

6. The explanatory power of a scientific theory is most closely linked to its capacity to generate testable:

a. assumptions.

b. correlations.

c. predictions.

d. variables.

7. Which technique involves repeating the essence of an earlier research study with different subjects and in different circumstances?

a. replication

b. correlational research

c. random sampling

d. naturalistic observation

e. random assignment

8. In a written report of their research, psychologists specify exactly how anxiety is assessed, thus providing their readers with a(n):

a. hypothesis.

b. independent variable.

c. operational definition.

d. standard deviation.

9. A hypothesis is a(n):

a. observable relationship between specific independent and dependent variables.

b. testable prediction that gives direction to research.

c. set of principles that organizes and explains newly discovered facts.

d. unprovable assumption about the unobservable processes that underlie psychological functioning.

10. The case study is a research method in which:

a. a single individual is studied in great detail.

b. a representative sample of people are questioned regarding their opinions or behaviors.

c. organisms are carefully observed in a laboratory environment.

d. an investigator manipulates one or more variables that might affect behavior.

11. The tendency to overestimate the extent to which others share our own attitudes is known as:

a. the hindsight bias.

b. the false consensus effect.

c. illusory correlation.

d. an illusion of control.

12. Which research method would be most appropriate for investigating the relationship between the religious beliefs of Americans and their attitudes toward abortion?

a. the survey

b. naturalistic observation

c. the case study

d. experimentation

13. In order to learn about the TV viewing habits of all the children attending Oakbridge School, Professor Devries randomly selected and interviewed 50 of the school’s students. In this instance, all the children attending the school are considered to be a(n):

a. population.

b. representative sample.

c. case study.

d. independent variable.

e. control condition.

14. In order to assess reactions to a proposed tuition hike at her college, Susan sent a questionnaire to every fifteenth person in the college registrar’s alphabetical listing of all currently enrolled students. Susan employed the technique of:

a. random assignment.

b. naturalistic observation.

c. replication.

d. correlation.

e. random sampling.

15. Professor Ober carefully monitors and records the behaviors of children on school playgrounds in order to track the development of their physical skills. Professor Ober is most clearly engaged in:

a. survey research.

b. naturalistic observation.

c. experimentation.

d. replication.

16. A statistical measure that indicates the extent to which changes in one factor are accompanied by changes in another is called a(n):

a. standard deviation.

b. independent variable.

c. correlation coefficient.

d. mean.

17. A researcher would be most likely to discover a positive correlation between:

a. intelligence and academic success.

b. financial poverty and physical health.

c. self-esteem and depression.

d. school grades and school absences.

18. If the points on a scatterplot are clustered in a pattern that extends from the upper left to the lower right, this would suggest that the two variables depicted are:

a. normally distributed.

b. positively correlated.

c. negatively correlated.

d. not correlated.

19. Which of the following correlation coefficients expresses the weakest degree of relationship between two variables?

a. –.12

b. +1.00

c. –.99

d. +.25

e. –.50

20. An extensive survey revealed that children with relatively high self-esteem tend to picture God as kind and loving, whereas those with lower self-esteem tend to perceive God as angry. The researchers concluded that the children’s self-esteem had apparently influenced their views of God. This conclusion best illustrates the danger of:

a. perceiving order in random events.

b. generalizing from extreme examples.

c. randomly sampling children’s views.

d. exaggerating the extent to which others share our beliefs.

e. assuming that correlation proves causation.

21. Illusory correlation refers to:

a. the perception of a relationship between two variables that does *not* actually exist.

b. a correlation that exceeds the value of +1.00.

c. a cluster of points on a scatterplot that suggests a correlation between two variables.

d. a correlation that is not statistically significant.

22. Karen erroneously believes that her test grades are negatively correlated with the amount of time she studies for her tests. Research on illusory correlation suggests that she is especially likely to notice instances in which:

a. poor grades follow either brief study or lengthy study.

b. either poor grades or good grades follow lengthy study.

c. good grades follow lengthy study and poor grades follow brief study.

d. poor grades follow lengthy study and good grades follow brief study.

23. On a series of coin tosses, Oleg has correctly predicted heads or tails seven times in a row. In this instance, it is reasonable to conclude that Oleg’s predictive accuracy:

a. defies the laws of statistical probability.

b. illustrates the phenomenon of illusory correlation.

c. is inconsistent with the false consensus effect.

d. is a random and coincidental occurrence.

24. The illusion of streak shooting in basketball best illustrates the need to recognize that:

a. random sequences of events often don’t look random.

b. sampling extreme cases leads to false generalizations.

c. events often seem more probable in hindsight.

d. correlation does not prove causation.

25. Researchers use experiments rather than other research methods in order to distinguish between:

a. facts and theories.

b. causes and effects.

c. case studies and surveys.

d. random samples and representative samples.

26. In a test of the effects of sleep deprivation on problem‑solving skills, research participants are allowed to sleep either 4 or 8 hours on each of three consecutive nights. This research is an example of:

a. naturalistic observation.

b. survey research.

c. a case study.

d. an experiment.

e. correlational research.

27. In order to study the effects of loud noise on worker productivity, Dr. Murphy had one group of research participants work in a noisy room and a second group in a quiet room. Those who worked in the quiet room were exposed to the \_\_\_\_\_\_\_\_ condition.

a. experimental

b. survey

c. control

d. correlational

28. In a psychological experiment, the factor that is manipulated by the investigator is called the \_\_\_\_\_\_\_\_ variable.

a. dependent

b. independent

c. control

d. experimental

29. In a psychological experiment, the factor that may be influenced by the manipulated experimental treatment is called the \_\_\_\_\_\_\_\_ variable.

a. dependent

b. experimental

c. control

d. independent

30. When you read a bar graph, it is most important for you to:

a. understand the concept of the false consensus effect.

b. mentally transform the data into a scatterplot.

c. identify the value of the standard deviation.

d. note the range and size of the scale values.

e. remember that correlation facilitates prediction.

31. Which measure of central tendency is used to calculate your grade-point average?

a. standard deviation

b. median

c. mean

e. mode

32. The difference between the highest and lowest scores in a distribution is the:

a. mean.

b. range.

c. median.

d. standard deviation.

e. percentile rank.

33. Which of the following is a measure of the degree of variation among a set of events?

a. mean

b. scatterplot

c. standard deviation

d. normal distribution

e. correlation coefficient

34. Which of the following events is the most probable?

a. flipping 6 or more heads in 10 coin flips

b. flipping 60 or more heads in 100 coin flips

c. flipping 600 or more heads in 1000 coin flips

d. All the above are equally probable.

35. An awareness of extensive cultural differences in attitudes and values is most helpful for avoiding:

a. replication.

b. random sampling.

c. the hindsight bias.

d. the false consensus effect.

e. naturalistic observation.

36. Psychologists’ personal values and goals:

a. are carefully tested by means of observation and experimentation.

b. lead them to avoid conducting any experiments of a controversial nature.

c. can bias their observations and interpretations.

d. have very little influence on the process of scientific observation.

37. Your best friend criticizes psychological research for being artificial and having no relevance to behavior in real life. In defense of psychology’s use of laboratory experiments you point out that:

a. psychologists make every attempt to avoid artificiality by setting up experiments that

closely simulate real-world environments.

b. psychologists who conduct basic research are not concerned with the applicability of their

findings to the real world.

c. most psychological research is not conducted in a laboratory environment.

d. psychologists intentionally study behavior in simplified environments in order to gain

greater control over variables and to test general principles that help to explain many

behaviors.

38. A lopsided set of scores that includes a number of extreme or unusual values is said to be:

a. symmetrical.

b. normal.

c. skewed.

d. dispersed.

39. When a difference between two groups is “statistically significant,” this means that:

a. the difference is statistically real but of little practical significance.

b. the difference is probably the result of sampling variation.

c. the difference is not likely to be due to chance variation.

d. all of the above are true.

40. The football team’s punter wants to determine how consistent his punting distances have been during the past season. He should compute the:

a. mean.

b. median.

c. mode.

d. standard deviation.

41. What is the median of the following distribution: 10, 7, 5, 11, 8, 6, 9?

a. 6

b. 7

c. 8

d. 9

42. The four families on your block all have annual household incomes of $25,000. If a new family with an annual income of $75,000 moved in, which measure of central tendency would be most affected?

a. mean

b. median

c. mode

d. standard deviation

43. Bob scored 43 out of 70 points on his psychology exam. He was worried until he discovered t that most of the class earned the same score. Bob’s score was equal to the:

a. mean.

b. median.

c. mode.

d. range.

44. Which of the following is *not* a measure of central tendency?

a. mean

b. range

c. median

d. mode

45. In order to determine the effects of a new drug on memory, one group of subjects is given a pill that contains the drug. A second group is given a sugar pill that does *not* contain the drug. This second group constitutes the:

a. random sample.

b. experimental group.

c. control group.

d. test group.

46. In order to study the effects of lighting on mood, Dr. Cooper had students fill out questionnaires in brightly lit or dimly lit rooms. In this study, the independent variable consisted of:

a. the number of subjects assigned to each group.

b. the students’ responses to the questionnaire.

c. the room lighting.

d. the subject matter of the questions asked.

47. Rashad, who is participating in a psychology experiment on the effects of alcohol on perception, is truthfully told by the experimenter that he has been assigned to the “high-dose condition.” What is wrong with this experiment?

a. There is no control condition.

b. Rashad’s expectations concerning the effects of “high doses” of alcohol on perception may

influence his performance.

c. Knowing that Rashad is in the “high-dose” condition may influence the experimenter’s

interpretations of Rashad’s results.

d. Both b. and c. are correct.

48. The procedure designed to ensure that the experimental and control groups do *not* differ in any way that might affect the experiment’s results is called:

a. variable controlling.

b. random assignment.

c. representative sampling.

d. stratification.

49. In an experiment to determine the effects of exercise on motivation, exercise is the:

a. control condition.

b. intervening variable.

c. independent variable.

d. dependent variable.

50. Which of the following procedures is an example of the use of a placebo?

a. In a test of the effects of a drug on memory, a subject is led to believe that a harmless

pill actually contains an active drug.

b. A subject in an experiment is led to believe that a pill, which actually contains an

active drug, is harmless.

c. Subjects in an experiment are not told which treatment condition is in effect.

d. Neither the subjects nor the experimenter know which treatment condition is in effect.