A.P. Psychology - Chapter 2 Test - The Research Enterprise in Psychology

Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

1. Any measurable conditions, events, characteristics, or behaviors that are controlled or observed in a study are called
   a. hypotheses
   b. correlations
   c. variables
   d. confounds

2. Dr. Malm predicts that if teachers ignore students who act up in class, fewer students will act up in class. Dr. Malm's prediction is an example of
   a. an operational definition
   b. a theory
   c. inferential statistics
   d. a hypothesis

3. Dr. Critelli is studying aggression in children and plans to define aggression as the number of times one child pushes or strikes another child. Defining aggression in this way would
   a. be an example of a hypothesis
   b. violate ethical guidelines for psychological research
   c. represent an operational definition
   d. require a double-blind research design

4. Two of the data collection techniques that are MOST likely to involve direct contact between the researcher and the research participant are
   a. direct observation and interviews
   b. archival research and psychological testing
   c. questionnaires and interviews
   d. archival research and questionnaires

5. Differing approaches to the observation, measurement, manipulation, and control of variables in empirical studies are referred to as
   a. validity operationalizations
   b. research methods
   c. inductive techniques
   d. statistical analyses

6. A group of researchers is investigating the effects of gingko biloba on memory. During the first part of the study the animals learn to run a maze while they are not receiving the supplement; in the second part of the study the animals learn to run a different maze while they are receiving the supplement. In each case the researchers count how many trials it takes before the animals can run the maze pattern without making any errors. In this study, the independent variable is
   a. the type of animal that the researchers select for the study
   b. the presence or absence of the food supplement in the animal's diet
   c. the number of trials it takes to run the maze without making any errors
   d. the age of the animals in the study
7. Researchers studying the effects of sleep deprivation tested the physical coordination skills of 25-year-old males who had been sleep deprived for either 24, 36, or 48 hours. In this study, the dependent variable would be
   a. the age of the research participants
   b. the physical coordination skills of the men in the study
   c. the length of time the participants had been sleep deprived
   d. the type of physical coordination task the researchers use

8. If we view an experiment as an attempt to establish a cause-effect relationship, the _______ variable would be the cause, and the _______ variable would be the effect.
   a. dependent; independent
   b. independent; dependent
   c. control; experimental
   d. independent; confounded

9. A researcher wants to see if a protein-enriched diet will enhance the maze-running performance of rats. One group of rats is fed the high-protein diet for the duration of the study; the other group continues to receive ordinary rat chow. In this experiment, the group of rats that is fed the high-protein diet is _______ group; the group that receives ordinary rat chow is _______ group.
   a. a control; a control
   b. a control; an experimental
   c. an experimental; an experimental
   d. an experimental; a control

10. Dr. Prutherow believes that people who are under stress will develop more colds than people who are not under stress. When he randomly selects 10 participants and exposes them to high levels of stress, he finds that 9 of the participants develop colds. Based on these results he concludes that stress causes an increase in colds. Dr. Prutherow’s reasoning may be flawed because in this study
   a. there was no dependent variable in his study
   b. there was no control group for comparison
   c. he didn’t formulate a hypothesis before he collected his data
   d. he didn’t measure the independent variable when the study ended

11. By definition, an extraneous variable is
   a. a variable that affects the control group but not the experimental group
   b. the same thing as a dependent variable
   c. a variable that is completely irrelevant to both the independent and dependent variables
   d. a variable, other than the independent variable, that may influence the dependent variable

12. When two variables are linked and their individual effects cannot be separated out, we speak of the variables as being
   a. independent variables
   b. dependent variables
   c. confounded variables
   d. codependent variables

13. Diaz conducts a decision-making experiment to determine if people reason more logically when they have more time to decide. All the participants who are under 40 are allowed 15 minutes to reach a decision about a problem; all the participants who are over 40 are allowed 20 minutes to reach a decision about the same problem. Diaz has a problem with his experimental design because
   a. there are two control groups and no experimental group
   b. the time allowed for the decision is confounded with the independent variable
   c. there is no dependent variable in the experiment
   d. the age of the participants is confounded with the independent variable
14. Random assignment of subjects occurs when
   a. subjects are allowed to choose which group or condition they would like to be in
   b. a different method is used to assign each subject to a group or condition
   c. all subjects have an equal chance of being assigned to any of the groups or conditions
   d. all topics have an equal chance of being assigned to a particular experimenter

15. Derrick designed an experiment in which participants listened to a persuasive speech delivered either by a person who was very tall or a person who was average in height. In addition, the speeches were delivered either by individuals wearing business clothes or by people wearing casual clothes. In this example, Derrick
   a. has two dependent variables, and will be able to determine if persuasion interacts with any other factors
   b. has two independent variables, and will be able to determine if height and style of clothing interact
   c. does not have a control group, which should reduce the impact of self-reporting bias in his study
   d. is using a double-blind procedure, which should reduce experimenter bias

16. The main advantage associated with the experimental method is
   a. its precise control
   b. its ability to duplicate real life in the laboratory
   c. that it can be used to explore just about everything
   d. participants usually enjoy taking part in the study

17. A group of researchers wanted to investigate allegations of sexual harassment on a company's assembly line. To make their observations, the researchers took jobs working on the assembly line and pretended to be new employees. In this example, the researchers were using
   a. naturalistic observation
   b. correlational research
   c. survey research
   d. the case study method of research

18. One advantage of naturalistic observation is that it
   a. approximates the experimental method
   b. allows for cause-and-effect conclusions to be drawn
   c. allows behavior to be studied in realistic settings
   d. involves random assignment

19. Dr. Kincaid was interested in the topic of autistic savants (individuals with limited abilities in many areas, but with an exceptional talent in one specific area). In the initial part of the investigation Dr. Kincaid carefully observed and compiled detailed files on three individuals who were autistic savants. Dr. Kincaid is conducting
   a. case study research
   b. survey research
   c. correlational research
   d. experimental research

20. One of your friends is writing a research paper and wants to obtain information about the depth of personal information people typically reveal during a first date. Directly observing a large number of people during a first date will be difficult, so your friend asks for your advice on the best way to collect this type of data. The best suggestion would be for your friend to use
   a. the case study approach
   b. archival research
   c. a double-blind observational study
   d. a survey
21. The use of mathematics to organize, summarize, and interpret numerical information is referred to as
   a. calculus
   b. functional analysis
   c. statistics
   d. algebra

22. The two basic types of statistics are
   a. descriptive and inferential
   b. central tendency and variability
   c. sampling and correlative
   d. parametric and nonparametric

23. The score that falls exactly in the center of a distribution of scores, such that half the scores fall below that score and half the scores fall above it, is the
   a. mean
   b. standard deviation
   c. range
   d. median

24. Your grade point average is an example of which measure of central tendency?
   a. median
   b. mean
   c. mode
   d. midpoint

25. Charley tells you that 17 out of the 30 students enrolled in his English class scored exactly 62 points on the last exam. Conceptually, this is the same as saying
   a. the mean for that particular English exam was 62 points
   b. the median for that particular English exam was 62 points
   c. the standard deviation for that particular English exam was 62 points
   d. the mode for that particular English exam was 62 points

26. When the scores for a recent Chemistry exam were calculated, the mean was 60 and the median was 65. Later the professor discovered that one score had been recorded incorrectly; it had been entered into the computer as a 5, instead of as a 50. When this correction is made
   a. the median for the exam will change, but the mean will stay the same
   b. both the mean and the median for the exam will change
   c. the mean for the exam will change, but the median will stay the same
   d. neither the mean nor the median for the exam will be affected

27. Carla earned 78 points on her statistics exam. Ten of the students in her class earned higher scores than she did, and ten students earned lower scores than she did. Based on this information, you can conclude that Carla's score of 78 points is
   a. the standardized score for her class
   b. the median for her class
   c. the mean for her class
   d. the mode for her class

28. The correlation coefficient is a measure of
   a. central tendency
   b. the amount of variability in a data set
   c. the degree of relationship between two variables
   d. the difference between the largest and smallest scores in a data set
29. Suppose a researcher discovered a +.87 correlation between the length of a person's toes and the number of shoes the person owns. In general, people who own the fewest number of shoes would have
   a. small toes
   b. large toes
   c. medium-sized toes
   d. either very large or very small toes

30. The FDA found that people who used a particular diet drug combination had more heart valve defects than people who had not taken the diet drug combination. This suggests that the use of the diet drug combination and heart valve defects are
   a. negatively correlated
   b. independent variables
   c. positively correlated
   d. interactive variables

31. Imagine that the personality traits of openness and extroversion are positively correlated. If Andrea's score in openness is extremely low
   a. she would most likely score at the low end of the extroversion scale
   b. it is impossible to predict how she is likely to score on the extroversion scale without more information
   c. she would most likely score at the high end of the extroversion scale
   d. she would probably score close to the median on the extroversion scale

32. As the number of bystanders increases, people are less likely to help someone who is in distress. This suggests that the size of a crowd and helping behavior are
   a. negatively correlated
   b. uncorrelated
   c. positively correlated
   d. dependent variables

33. Imagine that the personality traits of conscientiousness and extroversion are negatively correlated. If Wilfred's score in conscientiousness is extremely low
   a. he would probably score close to the median on the extroversion scale
   b. he would most likely score at the high end of the extroversion scale
   c. he would most likely score at the low end of the extroversion scale
   d. it is impossible to predict how he is likely to score on the extroversion scale without more information

34. A correlation coefficient of zero describes
   a. a positive relationship between two variables
   b. a negative relationship between two variables
   c. the lack of a relationship between two variables
   d. a perfect relationship between two variables

35. Of the following, the correlation coefficient that indicates the strongest relationship between the two variables being measured is
   a. +0.65
   b. -0.89
   c. 0.00
   d. +3.45
36. Of the following, the correlation coefficient that indicates the weakest relationship between the two variables being measured is
   a. +0.95
   b. -0.69
   c. +0.01
   d. -4.50

37. Statistics that are used to interpret data and draw conclusions are called
   a. descriptive statistics
   b. inferential statistics
   c. numerical statistics
   d. significant statistics

38. To determine whether students would like more courses scheduled in the late afternoon and evening hours, the Student Services department sends questionnaires to 50 students selected at random from the 5,000 who are registered at the campus. In this instance, the 5,000 students who are registered at the campus would be
   a. a population
   b. a representative sample
   c. a biased sample
   d. the independent variable

39. To discover whether residents of a city are in favor of building a new sports stadium, the team's owner randomly selected and interviewed 500 of the city's 500,000 residents. In this instance, the 500 people that the owner interviewed would be
   a. a biased sample
   b. a population
   c. the dependent variable
   d. a representative sample

40. Sampling bias is a problem because it
   a. limits the generality of the findings
   b. makes it impossible to use inferential statistics
   c. makes it difficult to avoid a confounding of variables
   d. makes the effect of the independent variable appear to be bigger than it really is

41. Dr. Limmex is trying to win FDA approval for a new drug to treat anxiety. Dr. Limmex claims that 14% of the people who took this new drug reported reduced anxiety, however other researchers claim that 14% of patients who receive no treatment also report reductions in their anxiety levels. It appears that the patients who improved after taking Dr. Limmex's drug
   a. had a self-report bias
   b. may have been experiencing placebo effects
   c. were a non-representative sample
   d. should have been placed in the control group, rather than the experimental group

42. Darla has sent out a survey in which she is asking people to provide information about their attitudes on a number of sensitive subjects. When the surveys are returned Darla needs to be aware that the responses may be distorted due to
   a. placebo effects
   b. self-report biases
   c. statistical artifacts
   d. meta-analytic controls
43. Subjects' self-reports often indicate that they are healthier, happier, and less prejudiced than other types of evidence would suggest. The MOST likely explanation is
   a. experimenter bias
   b. faulty memory
   c. the social desirability bias
   d. a tendency to agree with almost every statement

44. John dislikes completing questionnaires, so each time he fills one out he always circles the same item (such as "strongly agree" or "strongly disagree"). John's behavior reflects
   a. the placebo effect
   b. a sampling bias
   c. social desirability
   d. a response set

45. Experimenter bias occurs when
   a. experimenters explicitly instruct the subjects to behave in a way that will be consistent with the hypothesis
   b. experimenters desire to make a favorable impression on their subjects
   c. experimenters' beliefs in their own hypotheses affect either the subjects' behavior or their observations of the subjects
   d. experimenters conduct their studies in a completely objective manner

46. Scarlett is a graduate student who is observing children playing together after watching a film. She knows that some children saw a film that contained graphic scenes of violence and some children saw a non-violent film, but she doesn't know which film each child she is observing watched. In this case, Scarlett is recording data for
   a. a double-blind research study
   b. a study with two independent variables
   c. an unethical research study
   d. a correlational study with confounded variables

47. Which of the following statements is MOST accurate?
   a. Deception has never been used in psychological research.
   b. Although deception has been used in the past, it has recently been banned by the American Psychological Association.
   c. In recent years, there has been a steady increase in the use of deception in psychological research.
   d. Deception has been fairly common in psychological research since the 1960s.

48. Zigfried Rosenblat, Jr. took part in a study on sexual deviance last year. He was somewhat dismayed when he read an article in a weekly journal discussing sexual deviance in which one patient was referred to as ZRJ. Although the article claimed all names had been disguised to protect personal identities, Zigfried is convinced he is the individual described in the article. In this case, it is possible that the researchers who conducted the study violated the ethical principle of
   a. informed consent
   b. right to privacy
   c. full disclosure
   d. adequate debriefing
49. Mackenzie took part in an experiment where she was told she would be required to sit alone in a darkened room for 30 minutes, after which she would be asked to complete a brief questionnaire about her future goals and plans. When she finished the questionnaire she was told the experiment was over. Mackenzie never really understood the purpose of the study, and she wasn’t sure why she had to wait in the darkened room before filling out the short questionnaire. In this case, it would appear that the researchers who conducted the experiment
a. did not use an adequate debriefing procedure
b. failed to obtain informed consent
c. violated Mackenzie’s right to privacy
d. did not provide adequate protection from harm

50. Which of the following statements is MOST accurate?
a. More than one-third of all psychological studies involve animals.
b. The American Psychological Association has developed strict ethical guidelines for research involving animals.
c. There have been few, if any, major advances in the treatment of mental or physical disorders in humans that are attributable to animal research.
d. The majority of psychological studies using animals involve painful or harmful manipulations.

51. The validity of a personality test is best indicated by which of the following?
a. the correlation between test scores and some other relevant measure.
b. the correlation between test scores and IQ
c. the inverse correlation of the variables being tested
d. the number of people in the test’s norming population
e. the number of questions in the test that can be objectively scored

52. Dr. Lewis decided to study the television viewing habits of her students and therefore demanded that they complete and return a survey regarding their viewing habits. Which of the following ethical principles was clearly violated in this study?
a. the right to have a copy of the results
b. the right to have a copy of the survey
c. the right to be protected from unnecessary risk of harm
d. the right to refuse to participate in the study
e. the right to be informed of deception

53. A researcher conducts an experiment to test the claim that new drug Y is more effective than standard drug X in inhibiting arousal. The researcher randomly assigns participants to receive drug Y or drug X and subsequently measures arousal. In this experiment, participants receiving drug Y constitute the
a. dependent variable
b. confounding variable
c. experimental group
d. control group
e. placebo group

54. In a normal distribution, approximately what percent of the scores occur within one standard deviation above and below the mean?
a. 5%
b. 16%
c. 33%
d. 68%
e. 97%
55. When a teacher compares the performance of her students on the even and odd-numbered questions in a multiple-choice test, she is determining
   a. equivalent-form reliability
   b. split-half reliability
   c. face validity
   d. concurrent validity
   e. construct validity

56. Questions 56 - 58 are based on the passage below.

   A researcher studying the effect of noise level on concentration randomly assigns student participants to either a noisy room or a quiet room to take a problem-solving test. The researcher subsequently compares the two groups' test scores using a t-test and concludes p=.05.

   The dependent variable in this study is the
   a. p value
   b. noise level
   c. problem-solving test scores
   d. t-test
   e. experimental group

57. The independent variable in this study is the
   a. p value
   b. noise level
   c. problem-solving test scores
   d. t-test
   e. experimental group

58. The researcher's conclusion that p = .05 most likely indicates
   a. that the difference in the two groups' scores is likely due to chance
   b. that a loss of concentration is common among students
   c. the presence of a confounding variable
   d. that the difference between the two groups is statistically significant
   e. that noise has no effect on concentration
59. Which of the following scatterplots depicts the most predictive negative correlation between 2 variables.

a. 

b. 

c. 

d. 

e. 

60. Questions 60 - 62 refer to the following study

A student hypothesizes that high school students consuming different flavors of a drink before a spelling test will perform differently. A study to test the hypothesis finds that with a bitter drink, performance is best 6 hours after drinking it, whereas with a sweet drink, performance is better 1 hour after drinking it.

Which of the following are the independent variables?

a. Test scores and high school students
b. Test scores and time of consumption
c. Flavor of the drink and time of consumption
d. Flavor of the drink and high school students
e. Flavor of the drink and test scores

61. Which of the following is the dependent variable?

a. Flavor of the drink
b. Participants’ spelling test scores
c. Participants’ ages
d. Time the drink was consumed
e. Number of drinks consumed
62. An interaction between variables complicates the researcher’s explanation of findings. Which of the following are most likely involved in this interaction?
   a. Test scores and high school students
   b. Test scores and time of consumption
   c. Flavor of drink and time of consumption
   d. Flavor of drink and high school students
   e. Flavor of drink and test scores

63. Two friends attribute their high math scores to their high level of effort and ability in math and their low Spanish scores to their teacher’s subjective grading and favoritism. In this situation these students are exhibiting
   a. the actor-observer effect
   b. the hindsight bias
   c. scapegoating
   d. equity
   e. the self-serving bias

64. For a language test with normally distributed scores, the mean was 70 and the standard deviation was 10. Approximately what percentage of test takers scored 60 and above?
   a. 16
   b. 34
   c. 68
   d. 84
   e. 95

65. A researcher asks elementary, junior high, senior high, and college students to define the term “cheating,” and analyzes differences in their definitions across age groups. This is an example of which type of study?
   a. Longitudinal
   b. Sequential
   c. Cross-sectional
   d. Case Study
   e. Observational
A.P. Psychology – Chapter 2 Test, Part II

**Scatter plot**
On the bottom of this piece of paper, complete a scatter plot of the data provided for you. Determine whether the two variables are positively correlated, negatively correlated, or not correlated at all. Explain your answer. Also, find the mean.

For bonus points – find the variance and the standard deviation.

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