

The purpose of this assessment is to examine Psychology student knowledge of experimental design, statistical analyses, and conclusions derived from psychological research. This assessment is anonymous and will help us to plan for future course development. **Please answer the following questions about yourself.**

1. What degree(s) are you seeking:
  - a. Bachelor of Science (BS) in Applied Psychology
  - b. Bachelor of Arts (BA) in Psychology
  - c. Both BS in Applied Psychology and BA in Psychology
  - d. Other degree (specify): \_\_\_\_\_
  
2. Please check your class standing:
  - a. Senior
  - b. Junior
  - c. Sophomore
  
3. Have you taken/completed PSYC 309 Scientific Principles of Psychology?
  - a. Yes
  - b. No
  
4. Have you taken/completed PSYC 313 Research Methods in Psychology?
  - a. Yes
  - b. No
  
5. Have you completed or are you currently taking:
  - a. PSYC 490 Senior Capstone: Traditions of Psychology
  - b. PSYC 490A Senior Capstone: Developmental Psychology
  - c. Have not taken a Senior Capstone to date
  - d. Am taking a different Senior Capstone
  
6. How many credits of PSYC 499 (Independent Study focusing on Research) have you completed?
  - a. 0
  - b. 1-2
  - c. 3-4
  - d. More than 4

**Please answer the following questions with your best answer:**

7. An example of a testable hypothesis is
- “When people die, they see a bright white light.”
  - “A wagging tail means a dog is happy.”
  - “New neurons grow when old ones die off.”
  - “Little boys suffer Oedipal complex until they can successfully identify with the male gender role.”
8. The scientific goal of explaining and controlling the reasons for a behavior can be met by testing
- Causal hypothesis
  - Descriptive hypothesis
  - Explanatory hypothesis
  - Observational hypothesis
9. Critically evaluating a study means
- Critiquing the research method used.
  - Detecting the source of potential sampling error.
  - Questioning whether the scores and relationship reflect what we think they do.
  - Re-analyzing the data to verify that those reported by the researcher are correct.
10. If Professor Brown plans to “balance” the extraneous variable of sex of experimenter in her study, she will need to
- Use a male experimenter for half her participants and a female experimenter for the other half
  - Use several male experimenters
  - Use several female experimenters
  - Completely mechanize the study so no experimenter is needed to conduct it.
11. Experiments tend to have high \_\_\_\_\_ and low \_\_\_\_\_.
- Content validity; control
  - Internal validity; external validity
  - External validity; internal validity
  - Control; content validity

12. The median is the preferred measure of central tendency when
- The scale of measurement is nominal
  - The data distribution is not normal and the scale measurement is ordinal, interval, or ratio.
  - The scale of measurement is ratio.
  - The distribution is symmetrical and the scale of measurement is interval or ratio.
13. With a weak relationship, we \_\_\_\_\_ the null hypothesis; with a strong relationship we \_\_\_\_\_ the null hypothesis.
- Retain; reject
  - Validate; invalidate
  - Invalidate; validate
  - Reject; retain
14. Dr. Barton is conducting a study in which each participant is presented 10 stimuli and is asked to say either the word or the color of the ink the word is written in. Dr. Barton measures how long it takes to give the answer. All participants get all 10 stimuli, and Dr. Barton wants to compare the average time of response for each of the 10 stimuli. What statistical analysis should he use?
- Within-subjects ANOVA
  - Between-subjects ANOVA
  - Correlation coefficient
  - Dependent samples t-test
15. Suppose that you have developed a pill that you suspect will affect blood pressure, but you are not sure whether it will make blood pressure go up or down. Which of the following tests is appropriate?
- A one-tailed test
  - A two-tailed test
  - A post hoc comparison
  - A planned comparison
16. Suppose that you are writing a research report in APA style. In which section do you present descriptive and inferential statistics?
- Introduction
  - Method
  - Results
  - Discussion

17. By convention, it has been determined that alpha levels should be set no larger than
- .50
  - .10
  - .05
  - .01
18. The proper way to cite a source in a research report, when the authors' name appears outside the body of the sentence, is
- (Smith and Jones, 2001)
  - (Smith & Jones, 2001)
  - Smith and Jones (2001)
  - Smith & Jones (2001)
19. Where should figures be placed in a manuscript?
- In an appropriate place in the text
  - At the end
  - At the beginning
  - On the page immediately following their location in the text
20. Research proposals
- Are never written
  - Are written after data for the study have been collected
  - Help researchers refine their thinking
  - Do not include a review of previous research
21. The most commonly used sampling method in psychological research is probably
- Cluster sampling
  - Quota sampling
  - Simple Random Sampling
  - Convenience Sampling

22. Devon has a matched-pairs design, and his dependent variable is measured on a ratio scale. What inferential statistical test should he use?
- Chi-square test
  - Wilcoxon test
  - Friedman test
  - Dependent-samples t-test
23. Emma is examining the effects of two independent variables at the same time in the same experiment. Such a study is called a
- One-way design
  - Multifactor experiment
  - Simple experiment
  - Yoked control design
24. You have timed the rate at which participants can solve puzzles under three conditions of noise: high, medium, or low. In addition, the participants are under the influence of either marijuana, caffeine, or alcohol. What kind of design do you have?
- A 2 x 3 between-subjects factorial design
  - A 3 x 3 between-subjects factorial design
  - A 3 x 2 between-subjects factorial design
  - A 3 x 3 between-subjects one-way design
25. Ty is studying one participant variable (sex of participant) and one manipulated variable (equitable pay versus inequitable pay). Ty randomly assigns 40 men and 40 women to participate in only one of the two pay conditions. His dependent variable is task performance. What type of design does Ty have?
- One-way between-subjects
  - One-way within-subjects
  - Two-way between-subjects
  - Two-way within-subjects
26. Dr. Hoggatt examined the effects of light and clinical diagnosis upon mood. She obtained a group of participants who had been diagnosed as depressed and a group of control participants. She then randomly assigned the participants in each group to receive either one-hour, three hours, or five hours of bright light daily. She measured self-reported mood after one month of light therapy. What type of statistical test should Dr. Hoggatt use to analyze her data?
- One-way within-subjects ANOVA
  - Two-way between-subjects ANOVA
  - One-way between-subjects ANOVA
  - Two-way within-subjects ANOVA