

## Departmental Assessment 2006-2007

The assessment performed this year was completed in conjunction with the college's General Education Assessment Committee. A request was made by the committee to assess the college's General Education "Outcome 1" which concerns methodology. The department agreed to test our Introductory Psychology students with 10 common questions, listed below:

1. An investigator has found a negative correlation between the amount of vitamin C people take and the number of colds they get. The investigator could safely conclude from this finding that:
  - a. The more vitamin C taken is associated with getting fewer colds
  - b. People who get few colds are compelled to take vitamin C
  - c. Taking vitamin C causes people to get few colds
  - d. the more vitamin C taken is associated with getting more colds
  
2. An explanation using an integrated set of principles that organizes and predicts observations is called a(n):
  - a. experiment
  - b. hypothesis
  - c. theory**
  - d. survey
  
3. In a study involving the effects of drug use on dreams, the type and amount of drug used would be the \_\_\_\_\_ variable and the effect on a person's dreams would be the \_\_\_\_\_ variable.
  - a. dependent, independent
  - b. independent, dependent**
  - c. empirical, rational
  - d. rational, empirical
  
4. A correlation between self-esteem and annual income of  $-.75$  would indicate that:
  - a. higher levels of annual income are associated with lower levels of self-esteem**
  - b. lower levels of self-esteem are associated with lower levels of annual income
  - c. higher levels of self-esteem are associated with higher levels of annual income
  - d. it is impossible to predict annual income levels from knowledge of self-esteem levels
  
5. The key advantage of the experimental method is that it
  - a. allows for direct cause-effect conclusions**
  - b. enables experimenters to study more phenomena
  - c. is best suited for the investigation of abnormal behavior
  - d. enables replication or empiricism
  
6. The part of an experiment that the experimenter deliberately manipulates is the:
  - a. hypothesis
  - b. control group
  - c. dependent variables
  - d. independent variable**

7. A group of researchers wanted to determine if people will eat more food in a room with red paint and red decorations than in a room that is decorated in blue. Half the participants in this study ate in a red room and half ate in a blue room. The researchers then measured how much food was consumed in each of the two rooms. In this study, the independent variable was
- the type of food that was available during the study
  - the amount of food that was consumed
  - the color of the decorations in the room**
  - how hungry the participants were at the end of the study
8. Which of the following correlation coefficients expresses the strongest degree of relationship between two variables?
- .88**
  - .81
  - .15
  - 1.12
9. What is a representative sample?
- a small population
  - a group of participants who know each other
  - a sample that is identical in size and characteristics to a population
  - a sample selected to reflect the characteristics of a population of interest**
10. Which of the following is the best description of the use of inferential statistics?
- procedure used to explain the relationship between two variables
  - a method for summarizing a large amount of data with a few numbers
  - method used to determine the practical importance of research findings
  - procedure for determining if differences are due to chance or non-chance factors.**

The questions were voted on by the department members to reflect the kinds of questions about methodology that students in Introductory Psychology should know. Among the 546 Introductory Psychology students, the average score was 59% which, while low, was significantly above chance,  $t(356) = 33.30, p < .001$ . Notably, the Introductory Psychology students perform better than a group of 149 History 1700 (US History) students ( $M = 38.26\%$ ),  $t(674) = 9.32, p < .001$ ). Even among the History students, those had never had a psychology course ( $N = 79$ ) scored lower ( $M = 34.80\%$ ) than those who had ( $N = 70, M = 46.89\%$ ),  $p < .001$ .

The data were interpreted as evidence that Introductory Psychology students do learn the methodology of the discipline, but that more lower-division instruction in methodology may be required. In response, the department developed a new course, titled *Psychology as a Science and Profession*, which will function to offer lower division instruction in methods. The course was approved by the Senate in May.