

**PRACTICE -- IDENTIFYING INDEPENDENT AND DEPENDENT VARIABLES**

1. A survey of 1712 high school seniors in 421 high schools across the country revealed that 74% percent of students think that their teachers are doing a good or excellent job. Twenty-two percent of those surveyed said that they would like to become teachers. Although the seniors reported that their teachers generally have good content knowledge and are competent, the seniors also said that many of their teachers were not as interesting or creative as they should be.

Population of interest: \_\_\_\_\_

Independent variable: \_\_\_\_\_

Dependent variable: \_\_\_\_\_

2. This study investigated whether absent students whose homes received phone calls via a computer-activated message device had a better school attendance record than students whose homes were not called. 150 students in three high schools in Pirogue Parish were randomly selected to receive the messages whenever they were absent. 150 students randomly selected students served as the control group. They did not receive any absence notification. After 60 days, the attendance records for the groups were compared. Results revealed that students whose homes were called were absent significantly less than students whose homes were not called.

Population of interest: \_\_\_\_\_

Independent variable: \_\_\_\_\_

Dependent variable: \_\_\_\_\_

3. The researcher hypothesized that peer evaluation as part of the writing process would lead to improved attitudes toward writing as measured by the Writing Attitude Scale for Students (WASS). Four intact classes of eighth graders were randomly assigned to the treatment group. This group received peer evaluation training and utilized peer evaluation during three writing assignments. Four randomly selected classes served as the control group. They received feedback from teachers only after their writing assignments. Both groups completed the WASS after the research period was over. Results indicate that the treatment group had significantly higher scores on the WASS than the control group.

Population of interest: \_\_\_\_\_

Independent variable: \_\_\_\_\_

Dependent variable: \_\_\_\_\_

Determining Variables 3

Name: \_\_\_\_\_

4. Children who entered kindergarten at age 5 were compared with children who entered kindergarten at age 6 on measures of academic achievement taken at grade 5. Results indicate that children who entered kindergarten at age 6 scored significantly higher on standardized tests measuring reading achievement and mathematics achievement.

Population of interest: \_\_\_\_\_

Independent variable: \_\_\_\_\_

Dependent variable: \_\_\_\_\_

5. This study explored the relationships between measures of computer science aptitude, mathematics achievement, and writing achievement. For the 142 high school students in the sample, it was found that there is a moderately strong pattern of relationship (+.71) between computer science aptitude and mathematics achievement. However, there was no relationship between computer science aptitude and writing achievement.

Population of interest: \_\_\_\_\_

Independent variable: \_\_\_\_\_

Dependent variable: \_\_\_\_\_

6. The effects of social skill training on a 29 year-old mentally retarded male adult were explored. The subject listened to typical social situations (such as getting a compliment or saying thank you) on audiotape and discussed the situations with a therapist. The subject's positive social verbal interactions were counted before the training, at three times during the training period, and at three times after the training had been completed. All counts were taken by observing the subject at an evening recreation time in the subject's group home. Results show that positive interactions increased during the training period but then rapidly decreased after training had stopped.

Population of interest: \_\_\_\_\_

Independent variable: \_\_\_\_\_

Dependent variable: \_\_\_\_\_

7. A researcher wants to investigate the changing roles of working mothers and the pressures they and their children face. The researcher observes the behaviors of 12 four year-old children in a day care setting for 6 to 8 hours per week for 10 months. The mothers are observed as they drop off and pick up their children. The mothers and the day care workers are interviewed. The researcher discovers several recurrent themes in the observations and interviews.

Population of interest: \_\_\_\_\_

Independent variable: \_\_\_\_\_

Dependent variable: \_\_\_\_\_