3. If you are told only that you scored in the 80th percentile, do you know from

that description exactly how it was calculated? Explain.

Use the following information to answer the next three exercises: A Lake Tahoe Community College instructor is interested in the mean number of days Lake Tahoe Community College math students are absent from class during a quarter.

50. What is the population she is interested in?

a. all Lake Tahoe Community College students

b. all Lake Tahoe Community College English students

c. all Lake Tahoe Community College students in her classes

d. all Lake Tahoe Community College math students

71. The instructor takes her sample by gathering data on five randomly selected students from each Lake Tahoe CommunityCollege math class. The type of sampling she used is

a. cluster sampling

b. stratified sampling

c. simple random sampling

d. convenience sampling

This study investigated the cognitive effects of stimulant medication in children with mental retardation and Attention-Deficit/Hyperactivity Disorder. This case study shows the data for the Delay of Gratification (DOG) task. Children were given various dosages of a drug, methylphenidate (MPH) and then completed this task as part of a larger battery of tests. The order of doses was counterbalanced so that each dose appeared equally often in each position. For example, six children received the lowest dose first, six received it second, etc. The children were on each dose one week before testing.

This task, adapted from the preschool delay task of the Gordon Diagnostic System (Gordon, 1983), measures the ability to suppress or delay impulsive behavioral responses. Children were told that a star would appear on the computer screen if they waited “long enough” to press a response key. If a child responded sooner in less than four seconds after their previous response, they did not earn a star, and the 4-second counter restarted. The DOG differentiates children with and without ADHD of normal intelligence (e.g., Mayes et al., 2001), and is sensitive to MPH treatment in these children (Hall & Kataria, 1992).

Design Issues

This is a repeated-measures design because each participant performed the task after each dosage.

Descriptions of Variables

Variable Description

d0 Number of correct responses after taking a placebo

d15 Number of correct responses after taking .15 mg/kg of the drug

d30 Number of correct responses after taking .30 mg/kg of the drug

d60 Number of correct responses after taking .60 mg/kg of the drug

What is the independent variable of this experiment? How many levels does it have?



