



### Independent and Dependent Variables

1. Will students do better in school if you “pay for grades”? To test this question, an instructor gives students a math test. Before taking the test, half the students were told that they would receive \$0.25 for every correct answer. The other half was not given a monetary incentive. The number of correct answers was recorded for each student.

IV =

Levels of IV =

DV =

2. A social psychologist thinks that people are more likely to conform to a large crowd than to a single person. To test this hypothesis, the psychologist had either one person or five people stand on a busy walking path on campus and look up. (note: people who are in cahoots with the experimenter are called confederates). The psychologist stood nearby and counted the number of people passing by who looked up and the number who did not look up.

IV =

Levels of IV =

DV =

3. A psychologist is studying the effects of steroids on the aggressive behavior of male rats. Thirty rats receive twice-daily injections of a placebo, whereas another set of 30 rats receive twice-daily injections of a steroid. For one hour a day, the rats are placed in a cage together and all aggressive behaviors are recorded. For one week, lab assistants count the number of aggressive behaviors recorded to determine whether or not there is a difference between the two groups of rats.

IV =

Levels of IV =

DV =

4. Researchers were interested in examining the effectiveness of a new behavioral theory for children who have been diagnosed with ADHD. Sixty participants volunteered for the study. Participants were randomly assigned to receive either 5 weeks of the behavioral theory or they were placed on a wait list. After 5 weeks, all participants were observed for changes in their hyperactivity and impulsivity.

IV =

Levels of IV =

DV =

5. An organizational psychologist is interested in whether lowering the temperature in a factory will increase productivity (i.e., number of products assembled). At the factory, there are three rooms in which products are assembled. Each room is set at one of the following temperatures: 60 degrees, 70 degrees, or 80 degrees.

IV =

Levels of IV =

DV =

6. A researcher suspects that a newly discovered brain structure (the snookum) plays an important role in the desire to show affection. To test this, he administered a drug which inhibits the snookum. He tested 3 groups of people who received either: 0 mg, 5 mg, or 10 mg of the drug. He predicted that the more the snookum was inhibited, the less affection people would show (number of hugs and kisses to a cute, cuddly puppy).

IV =

Levels of IV =

DV =

7. A researcher suspects that the amount of oxygen in the air affects how quickly yeast will grow. To test this, he varies the amount of oxygen present in 3 closed chambers (low O<sub>2</sub>, medium O<sub>2</sub>, high O<sub>2</sub>) and records the rate of yeast growth (density per square mm) in each chamber.

IV =

Levels of IV =

DV =

8. A soap manufacturer wants to show that their detergent (Suddsy-Clean) works better to remove tough stains compared to the leading brand (Tidey-Clean). To test this, 20 white t-shirts were purchased. On each t-shirt, 10 different types of stains were placed. Half the t-shirts were then washed with Suddsy-Clean, and the other half were washed with Tidey-Clean. Afterwards, the number of stains left on each t-shirt was recorded.

IV =

Levels of IV =

DV =