

Name _____

Hour _____

READING GUIDE MODULE 2: EXPERIMENTS P. 29-36

Define experiment:

Define hypothesis:

Why is it important to understand the operational definition?

If I want to find out “Are people with higher incomes happier?” what terms do I need to operationalize?

Write a better research question with operational definitions of these two terms,

Define independent variable:

Define dependent variable:

In the following scenarios, indicate the independent and dependent variables.

You want to test a new drug that supposedly prevents sneezing in people with grass allergies. You randomly assign $\frac{1}{2}$ to the experimental group to receive the treatment and the other $\frac{1}{2}$ to the control group to receive a placebo. An hour later, you put the participant in a room filled with grass and count the number of sneezes over the next hour.

Independent variable:

Dependent variable:

A psychology teacher wants to know if students will do better on tests if they are paid for correct answers. The teacher gives a test and to one group, pays \$.25 per correct answer, to the other group no payment is given. The teacher then records the number of correct responses per student.

Independent variable:

Dependent variable:

Why is it important to have two groups on which to do an experiment?

Define experimental group:

Define control group:

In the following scenario, identify the experimental and control groups.

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).

Experimental group:

Control Group:

Define random assignment:

How is random assignment DIFFERENT from random sample?

Define confounding variables:

Using the scenario from above: A psychology teacher wants to know if students will do better on tests if they are paid for correct answers. The teacher gives a test and to one group, pays \$.25 per correct answer, to the other group no payment is given. The teacher then records the number of correct responses per student.

What are some possible confounding variables?

Define double-blind procedure:

Define placebo:

List the steps in the Experimental Method:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.

Define replicate:

Why is it so important to replicate studies?