

Variables & Conditions Quiz Practice

1. Researchers wanted to test the impact of amount of sleep deprivation on test scores. One group of students was allowed to sleep for only 2 hours the night prior to a test while a second group was allowed to sleep a full 8 hours the night prior to a test. All students wrote a simple mathematical test to determine which group were able to correctly answer the most questions.

Independent variable:

Dependent variable:

Experimental condition:

Control condition:

Operational definition of the DV:

2. Researchers hypothesized that the consumption of caffeine would stimulate appetite, making students hungrier. One group of students was given a caffeinated beverage one hour prior to lunch while the other group was given water one hour prior to lunch. Researchers then measured how much food was eaten, on average, by each group of students during the lunch break.

Independent variable:

Dependant variable:

Experimental condition:

Control condition:

Operational definition of the DV:

3. Researchers believe that increased presence of Acetylcholine (Ach) increases memory recall in rats. One group of rats was given an injection of Acetylcholine while the other group of rats was injected with a placebo. The rats were allowed to wander a maze for ten minutes to learn it. After ten minutes the rats were put in the maze with a piece of cheese at the end. Researchers timed how long each group of rats took, in seconds, to complete the maze.

Independent variable:

Dependent variable:

Experimental condition:

Control condition:

Operational definition of the DV:

4. Researchers wanted to test the impact of fatigue on short term memory. One group of participants was asked to run non-stop for ten minutes while the other group rested. Both groups were then given a list of words to look at for two minutes, and then asked to recall as many words from the list as they could remember out of the 25 words on the list.

Independent variable:

Dependent variable:

Experimental condition:

Control condition:

Operational definition of the DV:

5. A therapist believed that drug therapy was superior to cognitive therapy for symptoms of depression. He gave one group of depressed patients a new drug therapy for six months and the other group cognitive therapy for six months. After the six month period, he used a depression rating scale to determine which groups showed the greatest reduction in depressive symptoms.

Independent variable:

Dependent variable:

Experimental condition:

Control condition:

Operational definition of the DV:

6. A researcher was interested in how stress impacted heart rate in individuals. After a baseline heart rate measurement was taken for all participants, he exposed one group to a traumatic video designed to induce stress and the other group to a neutral video. Immediately after viewing the video heart rate measurements for each group of participants were taken to determine the difference between their baseline heart rate and their post video heart rate.

Independent variable:

Dependent variable:

Experimental condition:

Control condition:

Operational definition of the DV: