

Smithers' Experiment

Smithers thinks that a special juice will increase the productivity of workers. He creates two groups of 50 workers each and assigns each group the same task (in this case, they're supposed to staple a set of papers). Group A is given the special juice to drink while they work. Group B is not given the special juice. After an hour, Smithers counts how many stacks of papers each group has made.



Group A made 1,587 stacks,

Group B made 2,113 stacks.

Thinking about this experiment - List the following:

A) Independent variable (IDV): Which group gets the special juice.

B) Dependent variable (DV): How many stacks of paper are stapled.

C) Controlled variables/Constants: The size of the sets of paper, the type of stapler used, the number of papers in each set, the thickness of the paper sheets, etc.....

D) Hypothesis (IF.....THEN....): If the workers drink the special juice then they will staple more stacks of paper than the workers that don't drink the juice. Or If the workers don't drink the juice then they will be more productive by stapling more stacks of paper.

E) How could you improve this experiment?

1) Repeat the experiment. It is always good science to repeat experiments to see if you get the same results.

2) Have each group staple stacks of paper for an hour then drink the special juice and then staple for another hour. This would see if each person is affected the same by the special juice.

3) One group staples papers for one week without special juice, then give them the special juice for a week and record their productivity, while the 2nd group does the opposite (start with juice then goes for 1 week without the special juice). This would see if the order makes a difference.