

WEDNESDAY, NOVEMBER 7, 2018

matched
pair
design

Warm-up

- Researchers in Japan conducted an experiment on 13 individuals who were extremely allergic to poison ivy. On one arm, each subject was rubbed with a poison ivy leaf and told the leaf was harmless. On the other arm, each subject was rubbed with a harmless leaf and told it was poison ivy. All the subjects developed a rash on the arm where the harmless leaf was rubbed. Of the 13 subjects, 11 did not have any reaction to the real poison ivy leaf.
 - What was the placebo in this experiment?
 - How do the results of this study support the idea of a placebo effect?

Check Homework

Work on Experiment

OBJECTIVES

Content Objective: I will review experimental design including the concept of blocking.

Social Objective: I will participate in the class activity and discussions.

Language Objective: I will use correct vocabulary in my writing and speaking especially using terms blocking, experimental design, treatments, and response.

EXPERIMENT CONT.

3. What are the two treatments for this experiment?
4. Why is it not possible in this experiment to “blind” the subjects with respect to which experimental group they are in?
5. How can we select the subjects for this experiment and how many will participate?
6. To what group, if any, will we be able to generalize the results of our experiment? Why?

Write your design with enough detail that someone who has not been part of your design team could read the summary and be able to carry out the experiment as you intended. Make sure you address ethical issues of using human subjects.

Check against the four principles of experimental design.

MAKE CONCLUSIONS

9. Create a graphical display that allows us to compare the preferences for the two experimental groups.
10. Based on your display, do you think there is a difference in preference for the two groups? Do you think the order made a difference in preference?
11. Based on the data, do you think there is a preference for one of the two drinks over the other?



HOMework

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