

Video 15 Experimental Design

1. Why is the study of the effect of humans on the coral reefs not an experiment?

The study of the effects of humans on coral reefs was not an experiment because it was an observational study. Observational studies can't prove anything about cause and effect, and the reefs were only observed and not disturbed.

2. Who were the subjects in the Glucosamine/Chondroitin study? What did researchers want to find out?

The patients were people with painful osteoarthritis of the knee. The doctors wanted to find out if the supplements were helping with the pain in the patients.

3. Why were subjects randomly assigned to the treatments?

They were randomly assigned the treatments to help not skew the results. This way, neither the researcher nor the patient knew what they were taking, and the experiment, known as a double-blind experiment, would give unbiased results.

4. Dr. Confound conducted a very badly designed experiment on mood-altering medication. List some of the problems with his experiment.

This doctor's experiment had several issues. Experimenter bias, confounding variables, non-random assignment of treatments, lack of blindness, and a very small sample size.