

Video 15 Experimental Design

1. **Why is the study of the effect of humans on coral reefs, not an experiment?**
The purpose of the study was to learn more about human populations affect the coral reef ecosystems. The scientists didn't touch the reefs, but just observed and took pictures of it. It is to compare and contrast the human population from four different islands close by to each other. They are very close to each other yet the coral reefs' ecosystems are very different because of the population. It isn't an experiment because it is only an observational study.
2. **Who were the subjects in the Glucosamine/Chondroitin study? What did researchers want to find out?** The subjects were people with arthritis. They compared and contrasted those that got the medicine (glucosamine, chondroitin, a combo of both) There was also an active control group (over-the-counter medicines) and a control group (those that got a placebo).
3. **Why were subjects randomly assigned to the treatments?** It was a double-blinded experiment which means both the patient and the investigator knew which pill was taken every day. This way, there will be no biases.
4. **Dr. Confound conducted a very badly designed experiment on mood-altering medication. List some of the problems with his experiment.** Because of his bias, he treated one patient kindlier than the other. Also, the investigator projected a lack of blindness for one patient's medicine and did not have a random assignment of treatment for the other patient. Lastly, the sample of subjects was too small, and he only had 8 subjects.