

Experimental Principles, continued

Come up with a situation where you might choose to do stratified sampling. Why would you choose that here? How would you do it?

Come up with a situation where you might choose to do stratified assignment (also called stratified randomization or blocking). Why would you choose that here? How would you do it?

What's a control group, and why is it an important feature of an experiment? Do you know (or can you guess) what a "positive control" and a "negative control" are?

Consider these three different experiments. Each have a total of 80 observations. How are they different? What are the experimental units? What are the observational (or measurement) units? Are there repeated measures on each replication? How would you analyze these differently?

- A 40 control subjects and 40 treatment subjects, each measured once, after the treatment.
- B 40 total subjects, each measured twice, before the treatment and after.
- C 20 control subjects and 20 treatment subjects, each measured twice, both after the treatment.
- D 20 control subjects and 20 treatment subjects, each measured twice, before the treatment and after.

Ending a Meeting

- Note that meeting time that was agreed on is getting close.
- Summarize what was accomplished in the meeting, and what was not.
- Agree on next steps, and specifically who does what and by when
- How will you next communicate or meet?

Today you should have

- continued reviewing the principles of randomization, blocking, control groups, and replication
- practiced how to end a meeting

Name: _____

Do you feel ready to perform a stratified randomization? If not, what questions do you have?

Explain the difference between an experimental unit and a measurement unit.

Please leave this sheet, your nametag, and your playing card on the tables by the door.
The other handouts are for you to keep; this sheet will not be returned except by request.