

# Week 12 lecture notes - PSYC 3435

April 10, 2017

This is a short week due to Easter... we will talk about quasi-experimental designs

## Definitions

A *quasi-experiment* is a type of research design where a comparison is made, but **no random assignment** occurs

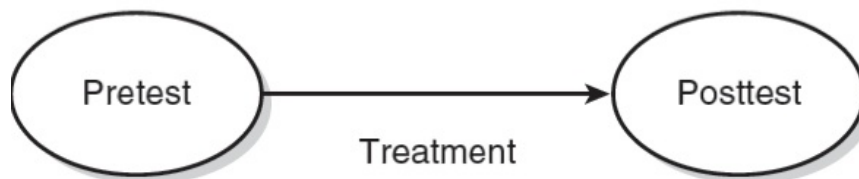
Examples:

- studies with *subject variables* (e.g., high vs. low IQ, males vs. females, smokers vs. nonsmokers, etc.)
- time is used as a variable (e.g., pretest-posttest, developmental designs [more on this later])

## Pretest-posttest designs

In a pretest/posttest design, a behavior is measured *twice*

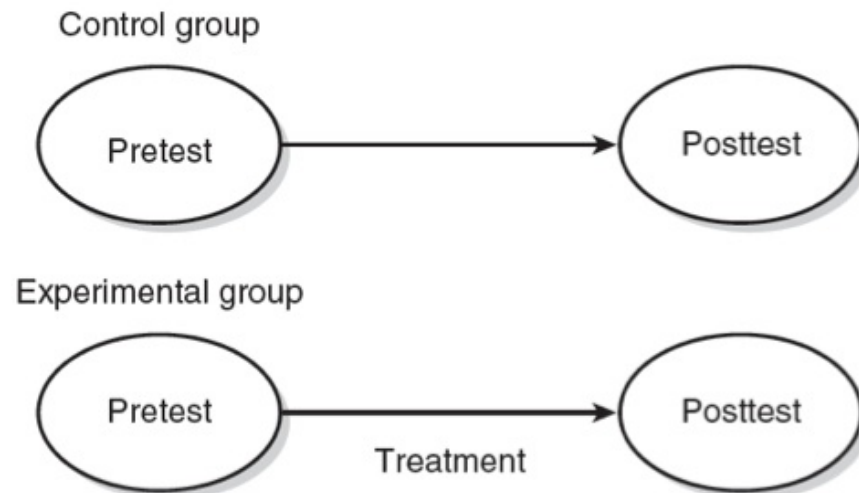
- once before treatment (pretest)
- once after treatment (posttest)



But...

- *history effects* – events that occur during the course of a study that can result in bias
- *maturation* – natural changes that happen to participant during course of study

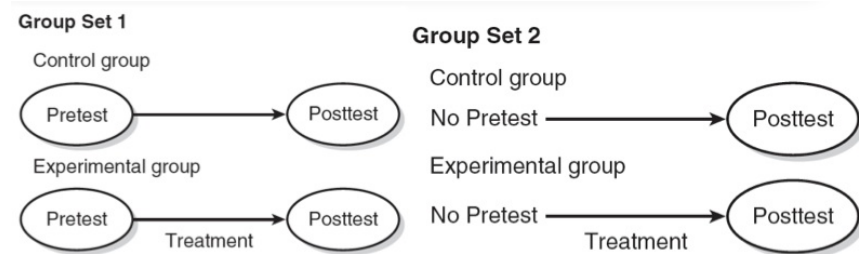
Better: pretest/posttest with *nonequivalent groups*



But..

- *testing effects* - occur when participants are tested multiple times and each subsequent test is affected by the previous tests

Even better: Solomon four-group design



Method: compare posttest scores across group sets

- if no differences between Group Set 1 and Group Set 2, then no testing effects have occurred.