Experimental Design

Experiments

- Experiments are a good technique to collect quantitative data for statistical analysis
- Experiments are the only technique that allow a researcher to verify a causal explanation
- Experiments require researchers to manipulate conditions, and therefore raise ethical issues
- Experiments are NOT a very common data collection technique in sociology

Experiments

For the purposes of this class, the important thing to understand is the LOGIC of experimental design.

Appropriate Research Questions for Experiments

Experiments are appropriate for research questions that:

- Demand a causal explanation
- Have a very limited scope (proximate causation)
- Use individuals or small groups (Micro-level research)

55C 470/570: Methods of Social Research

Experiments, Terminology

VARIABLES:

Treatment/Independent Variable Dependent Variable

CASES:

Random Selection

Experimental/Treatment Group

Control Group

Random Assignment

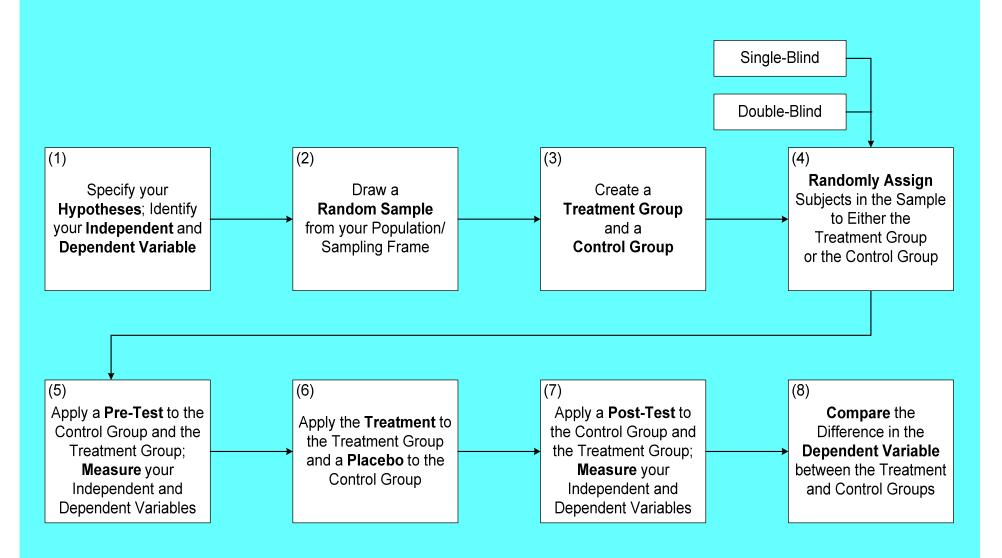
Double-Blind Assignment

MEASURES:

Pretest

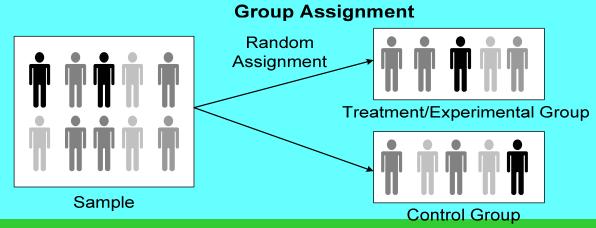
Posttest

Steps in Conducting an Experiment



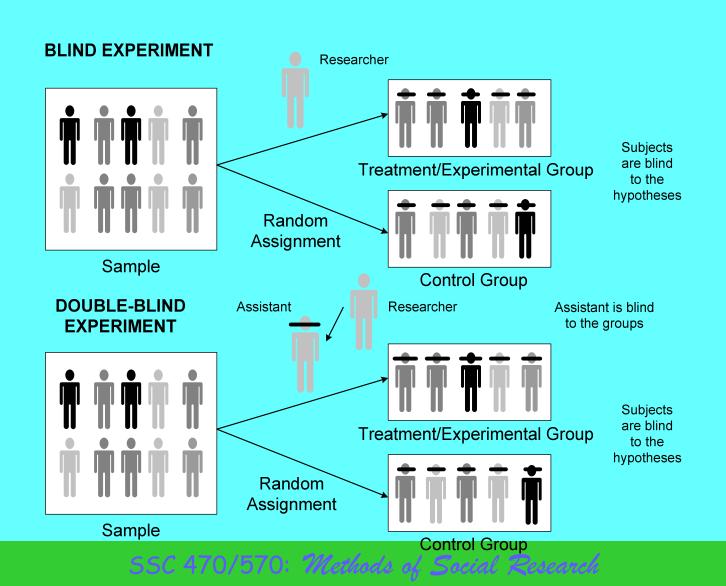
The Logic of Experimental Design: Choosing Subjects and Groups

Sampling Random Selection Sampling Frame Sampling



55C 470/570: Wethods of Social Research

The Logic of Experimental Design: Blind and Double-Blind Group Assignment



The Logic of Experimental Design: Tests and Treatment

