

13 Experimental Research: Quasi-Experimental and Single-Case Designs

Ways to Control Confounding Variables

Nonequivalent Control-Group Designs

Looks like Pretest-Posttest Control without Random Assignment

See Table 13.1 for threats to Internal Validity

Control Techniques

- Manipulated IV
- Definition
- Control Over Confounding Variables
- Statistical Control
- Matching

Interrupted Time-Series Design

Look for Change in Level or Slope

Key Threat is History

Regression-Discontinuity Design

Look for difference in level between control and treatment groups

Can be the strongest of all quasi-experimental groups

Primary threats are differential attrition and additive and interactive effects

Single-Case Design

A-B-A Designs

Its main problem is that it ends on the baseline condition

A-B-A-B Designs

Its main strength is that it ends on the treatment condition

Use only if responses should "revert"

If responses should not "revert," then use multiple baseline design

Multiple Baseline Design

Treatment is successively administered

With different persons

With different settings

With different behaviors

Changing Criterion Design

Establish baseline

Change one variable at a time

No agreement on whether length of phases should be equal

Methodological Issues

Analysis

Visual Inspection

Statistical Analysis