


Experimental Validity


Three Types of Validity

- _____ **validity**
– Are the changes in the DV due to changes in the IV?
- _____ **validity**
– How much can you generalize the findings of your experiment?
- _____ **validity**
– Does the manipulation tap into the IV?
– Does the outcome measure tap the DV?

Problems in _____ Designs




- An extraneous variable that differs systematically between experimental groups
- Source of error variance
- Due to poor experimental control
- Threatens internal validity



How do _____
occur?

- Selection
- Selection by Maturation Interaction
- Regression toward the mean
- Mortality
- Maturation
- History
- Testing
- Instrumentation



Common _____
in Experiments

- Experimenter expectancies
- Demand characteristics
- Participants' knowledge of other conditions
- Placebo effects
- Suspicion

Solving these problems

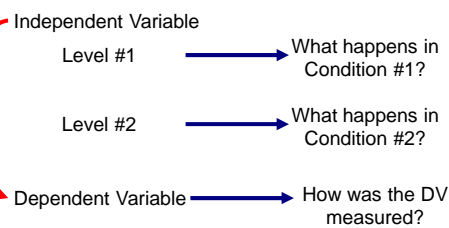
- Double-blind experiments
- Manipulation checks
- Control for communication between groups in different conditions
- Placebo control group
- Suspicion check

More Problems

- External validity issues
 - Controlled lab setting does not occur in the real world
 - Many experiments require animal testing
- Construct validity issues
 - Manipulation may not reflect IV accurately
 - Manipulation and outcomes require pre-testing

Experiment Design Chart

Conceptual Definition Operational Definition



→ = Internal Validity Issues
→ = Construct Validity Issues
