

Experiments

Designs

- Research that examines whether manipulated changes in one variable lead to changes in another variable of interest
- Best used when you are interested in determining the cause of a behavior
- Usually conducted in a controlled lab setting

Examples of Experimental _____

- Self-esteem is higher when people feel like they are part of a group, and lower when they feel like they are excluded
- Stress is higher in uncertain situations than in certain situations

Variable

- The "cause"
- The manipulated variable (ex. media)
- Random assignment to conditions

Variable

- The "effect"
- "Dependent on" the level of the independent variable (ex. aggression)

- 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 Bias
- Instrumentation
- Testing
- History
- Maturation

Common Confounds in Experiments

- _____ expectancies
- Demand _____
- Participants' knowledge of other _____
- Placebo effects
- Suspicion

Solving these problems

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

Pros and Cons

- Pros
 - Show a cause-effect relation
 - Often seen as more interesting by participants, fellow researchers, and public
- Cons
 - Some variables can't be ethically manipulated
 - Need to have a controlled lab setting
 - Often perceived as "unrealistic" situations

Things to Critique in Paper

- **Ethics**
 - Do the costs outweigh the benefits?
 - Were there any violations of the four ethical elements?
- **Internal Validity**
 - How do we know which variable causes the other?
 - Possible confounds
- **External Validity**
 - How much can we generalize this finding?
 - Other people, situations, over time?
- **Construct Validity**
 - How do we know the measures are accurate?
 - Could the measures be tapping into something else?
