

Types of Research Validity

1. Measurement

2. External

3. Internal

4. Statistical Conclusion

Research Hypotheses

(and evidence required to support each)

1. attributive
 - a way to measure the behavior
 - how to discriminate it from related behaviors
2. associative
 - reliable statistical relationship
3. causal
 - temporal precedence (cause before effect)
 - reliable statistical relationship
 - no confounds/alternative causal explanations

Research Design

Which participants do what when?

	Between groups	Within-groups
Causal Interpretability	BG True Exp.	WG True Exp.
True Exp.	BG Non Exp.	WG Non Exp.
Non Exp.		

Stages of Participant Sampling

1. Target Population
2. Sampling Frame (complete pop or purposive)
3. Selected Sample (research selected or self-selected & simple or stratified)
4. Data sample (volunteerism & attrition)

Data Collection

1. Collection – observation, self-report or trace
2. Setting -- laboratory, structured setting, or field
3. Data source – primary or archival

Participant Sampling Decisions

(and choices)

1. Complete population or purposive sampling frame
2. Researcher selected or invited/self-selected
3. Simple or stratified

Internal Validity

(components and type of variables involved)

1. Initial Equivalence (measured/subject vars)
2. Ongoing Equivalence (manipulated/procedural vars)

Types of Participant Assignment

1. RA of individuals by the researcher
2. RA of intact groups
3. Arbitrary
4. Administrative
5. Self-assignment
6. Non-assignment ("measured IV")

External Validity

(components and type of variables involved)

- 1 Population (measured/subject)
- 2 Setting (manipulated/procedural vars)
- 3 Task/Stimulus (manipulated/procedural vars)
4. Societal/Temporal

Kinds of Characteristics/Behaviors/Procedures

	Variable	Constant
Measured/Subject		
Manipulated/Procedural		

Role of each Characteristics/Behaviors/Procedures

1. Causal/Independent variable
2. Effect/Dependent variable
3. confound subject var confound procedural var
- control subject var control procedural var
- subject constant procedural constant