

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

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)

Participant Sampling Decisions

(and choices)

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

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")

Kinds of Measures/Behaviors

	Variable	Constant
Measured/ Subject		
Manipulated/ Procedural		

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.		

Data Collection

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

Internal Validity

(components and type of variables involved)

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

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

Role of each Measure/Behavior

1. Causal/Independent variable
2. Effect/Dependent variable
3. Control
 - variable
 - constant
4. Confounding variable