Research Processes, Choices & Validity Consequences

Research Process ➝ **Choices Made** ➝ **Validity Consequences**

Participant Selection

"Who participates in the Study"

Target Population

Sampling Frame

Selected Sample

Data Sample

Complete or Purposive

Researcher- or Self-selected
Simple or Stratified

Attrition

External → Population Validity

Participant Assignment*

"Who participates in what condition(s), when?"

Population (Representative or easy to control)
Setting (Laboratory, Structured or Field)

Assignment Procedure
- random assignment of individuals by the researcher ☺
- random assignment of groups ☹
- random assignment – arbitrary conditions by researcher ☹
- random assignment – conditions set by "administrator" ☹
- self assignment ☹
- non-assignment (e.g., natural or pre-existing groups) ☹

Internal → Initial Equivalence Validity
(Measured/Subject variables)

Choices of "who" and "where" can influence ability to perform proper random assignment

Research Design	BG	WG
True Experiment	☺	☺
Non-experiment	☹	☹

IV Manipulation, Task Completion & Data Collection

IV manipulation happens first. Sequence and timing of the others can vary greatly.

Population (Representative or easy to control)
Setting (Laboratory, Structured or Field)
Task/Stimulus (Representative or easy to control)

Length of manipulation (shorter or longer)

How IV is manipulated
How DV is measured

Internal → Ongoing Equivalence Validity
(Manipulated/Procedural variables)
Choices of "who", "where", "what doing", and "for how long" can influence the ability to maintaining control & get good measures

External → Population, Setting, Task/Stimulus
Choices of "who", "where", "what doing", and "for how long" can influence the ability to generalize research findings

Measurement Validity
Not all IV manipulations and DV measures are "equally good" – should know "conventions" and "traditions"

Choices of "who", "where", "what doing", and "for how long" can influence the ability to perform proper IV manipulations and/or get good measurement of the DV

Data Analysis

Statistical Conclusion Validity