



DATA COLLECTION

Making order out of chaos



Best practices

- Be systematic
- Consider feasibility
- Find areas of commonality to establish consistency
- Use validated instruments when possible
- Constructs → Concepts → Survey Items → Variables
Common Measures Reference Table
- The “how” matters as much as the “what”
- More is not always better



Be one with your IRB

- Increase capacity by doing human subject research ethics training and certification
 - [Collaborative Institutional Training Initiative \(CITI\)](#) and
 - [Health and Human Services Decision Trees](#)
- Always consider:
 - If you are targeting minors or other “vulnerable populations”
 - If you are audio recording or collecting “identifiable information”
 - If you want to publish something “generalizable”



Data Collection Key Terms

- **Intervention group** - those who received the program
- **Control group** – those who did not receive the program
- **Sampling procedure** – the process for selecting data collection participants
- **Unit of analysis** – what or whom is being studied
- **Sampling frame** – the list of units from which your sample is selected
- **Sample pool** – the group of units selected for data collection
- **Participants** – those from whom data was collected (n=)
- **Response rate** – number of participants divided by the number in the sampling pool
- **Bias** – The extent to which subgroups of a target population are reached unequally by a program.
- **Reliability** – The extent to which a measure produces the same results when used repeatedly to measure the same thing.
- **Validity** – The extent to which the measure actually measures what it is intended to measure



Data Collection Design Options

- **Post only** – Instrument implemented following intervention
- **Pre-post** – Instrument implemented before and after intervention
- **Retrospective pre-approach** – instrument implemented after, though asks about before and after
- **Quasi-experimental**
 - Use of control groups
- **Experimental**
 - Randomized controls



Asking Survey Questions

- 1 - Consider how the survey question connects to your evaluation questions
- 2 - Think about how you want to analyze and communicate the data yielded
- 3 - Ask about one concept at a time (avoid double-barreled questions)
- 4 - Use as few words as possible
- 5 - Spell out all abbreviations and acronyms
- 6 - Make every question count
- 7 - Use unbiased and neutral language
- 8 - Be consistent in formatting and response categories
- 9 - Let participants know their progress
- 10 - Think mobile friendly



About our study

- 5 year study, IRB approved, tracking participants over time
- Administered each Fall and in conjunction with our 4-H online registration process.
- Modifications made to add IRB procedures, motivational blocks, and customized end of survey messages.
- Sent to ALL registered 4-H members ages 7-19 via unique links sent via Qualtrics contact list
- No parent/guardian signature required, only their consent as indicated by a digital text box, youth assent upon entering the survey.
- Limited to two blocks per participant. Participant blocks based on program selections.