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 $\rightarrow$ Concepts $\rightarrow$ Survey Items $\rightarrow$ 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.