



A Guide to the Data Collection Methods

To start some general concepts:

Quantitative:

- Works with numbers
- Goal is to take large amounts of data and find one voice
- Usually deals with the who, what, where type questions

Qualitative:

- Works with words
- Goal is to take smaller amounts of data and present individual voices
- Usually asks the why and how questions

Validity (quantitative)

- Does it measure what you say you are measuring
- Looking for accuracy.

Reliability (quantitative)

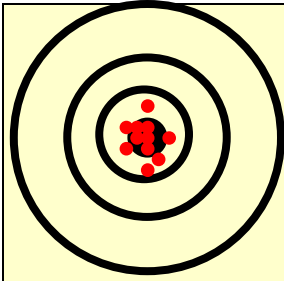
- To what degree are the findings consistent?

Relationships (quantitative)

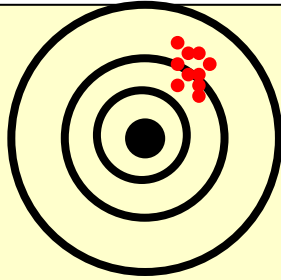
- *Correlation*
 - a relation existing between selected items
 - Measures the strength and direction of the linear association between two quantitative variables.
- *Statistical Significance*
 - An observed effect so large that it would rarely occur by chance.

Trustworthiness (qualitative)

- *Credibility*
 - *Are the researcher's interpretations credible to the participants?*
- *Transferability*
 - *To what extent are the findings applicable to other settings, situations, etc.?*
- *Dependability*
 - *To what extent were the methods decisions made consistently and appropriately throughout the research process?*
- *Confirmability*
 - *Do the results of the study make sense?*
 - *Can they be confirmed by others?*

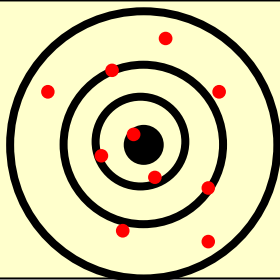


Results are reliable. 😊
Results are valid. 😊



Results are reliable. 😊
Results are NOT valid. 😞
We're consistently measuring something, but what is it?

**Can have
reliability
without
validity!**



Results are NOT reliable. 😞
Results are NOT valid. 😞

Surveys

What is it? Statistical surveys are used to collect quantitative information about items in a population. A survey may focus on opinions or factual information depending on its purpose, and many surveys involve administering questions to individuals. (Wikipedia)

Type: Quantitative or Qualitative (open-ended questions)

Design: Very specific way of asking questions

- Step #1: What are the objectives of your survey or what do you want to know?
 - Example: As a result of participating in a student affairs program, the student will:
 - Enjoy the program → **Satisfaction**
 - Learn something from the program → **Learning**
 - Behave differently because of the program → **Behavior**
 - Believe his or her time/money/energy was well-spent → **Return on Investment**
- Step#2: Develop the items, remember your different choices
 - Multiple Choice single answer
 - Multiple Choice check all
 - Scale Items (i.e. strong disagree to strongly agree)
 - Fill in the blank
 - Open-ended “essay” type questions
 - One-minute assessments
- Step #3: Bring the full survey together and go through checking system
 - Order (logical, flow, easy first, less important last, intersperse open-ended)
 - Valid and reliable
 - Vetting through different offices (politics at NYU)
 - Length
 - Pilot if you have a chance
- Step #4: Put in final version ready to send out

Medium: paper or on-line

Pros: lots of data relatively quickly and easily

Cons: students are HIGHLY surveyed, response rates becoming a huge issue on campus, skills sets for analysis

Previously Collected Data

What is it? Data that has already been collected for another purpose

- examples: usage data, shared survey data, judicial data, Brio data, etc.

Type: Quantitative or Qualitative

Design:

- Step #1: Gain access to the information – sometimes means calling other offices
- Step#2: Prepare data or get it in the form that you want
 - Example #1: Campus Climate
 - Example #2: Greek GPAs
- Step #3: Analyze the data, usually comes in two forms:
 - Numbers: run your own stats
 - Words/Documents: read through for themes
- Step #4: Put into themes for a report**

**Note: there is not data collection phase for this technique

Medium: other documents, reports, data bases, etc.

Pros: saves time and money, no time needed to collect data, no worry about response rates

Cons: reliant on reliability of source, non-responsive in nature

Interviews/Focus Groups

What is it? “a carefully planned discussion to obtain perceptions on a defined area of interest” (Stage and Associates (1992), *Diverse Methods for Research and Assessment*)

- examples: usage data, shared survey data, judicial data, Brio data, etc.

Type: Qualitative

The difference? Interviews and focus groups are planned and implemented in similar ways, the largest difference is that interviews are with one person and focus groups are with a group of people. This adds group dynamics to the situation which may or may not be effective. Because of the group dynamics it takes a facilitator that is very comfortable with groups vs. interviews can be conducted by people new to the process.

Design:

- Step #1: Decide on a topic and write questions
 - Questions should be open-ended (no yes/no)
 - Ordered in a way that goes from general to specific but also keeping in mind time limits
- Step#2: Prepare the logistics
 - Who are you inviting and how are you getting their info?
 - Where is it being held?
 - Who is going to facilitate? And taking notes?
 - Are you tape recording? If yes, do you have the equipment?
 - Are their incentives being offered?
- Step #3: Send out invitation/conduct the interview/focus groups

Medium: either individual or group conversations

Pros: excellent source of finding voice in a topic, smaller number needed, individual contact, responsive in nature, group interaction (FG only), students seem to like especially if there is a specific reward

Cons: data collection more time consuming, need to be careful who are you are selecting, harder to recruit, bias in analysis, good facilitators/note takers, need to present results in a way that is receptive to audience

Document Analysis

What is it? A form of qualitative research in which documents are used to give voice, interpretation and meaning

- Examples: flyers, magazines, agendas, blogs, emails, calendars, listservs, websites, student newspapers, papers written for a class, training manuals, handbooks, syllabi, annual reports, etc.
- Can be historical in nature or current

Type: Qualitative

Design:

- Step #1: Gather the documents
- Step #2: Examine the documents for appropriateness and credibility
 - If the document useful in this context?
- Step#2: Prepare how you are organizing the analysis
 - Flexible: Read once for key themes and code (we will explain coding soon)
 - Systematic: Create a chart or other tracking device by theme
- Step #3: Send out invitation/conduct the interview/focus groups

Medium: paper or electronic

Pros: Available, already “collected”, low costs, stable (although sometimes not with electronic sources), precise, quick timeline (sometimes), context based,

Cons: Context and language specific, not interactive, not reactive, disconnected from their creator but also creator bias, lack objectivity, incomplete, authenticity

Unobtrusive Measures or Observations

What is it? Naturally occurring data to observe without being obtrusive or creating a setting

- Examples: where students are congregating in a building, if items are being recycled and where, classic example of paths on grass, food left on trays, when lounge space is being used, where flyers are being hung, etc.

Type: Qualitative or quantitative

Design:

- Step #1: Decide what information you need and how/where you can get it
- Step #2: Create a tracking system
 - Observation charts
 - Rubrics
 - Recording form
- Step#2: Train those who are gathering data
- Step #3: Establish a base line
- Step #4: Collect data (could look different depending on your tracking system and what you are observing)

Medium: natural setting

Pros: natural setting gives you non-responsive information, data is usually there waiting to be collected, can track changes over time without relying on student participants

Cons: make sure you are measuring what you think you are, privacy and right to know ethics, collection bias/consistency