

Qual Methods part two

Informatics 162W

January 16, 2013

Six Parts of Qualitative Study Design

Instrument Selection

Sampling

Start with Self

Validity

Reliability

Gear

Validity

Accuracy and trustworthiness of instruments, data, and findings in research

- Instrument Validity
 - What's the instrument?
 - Then...What does it mean to have instrument validity?

Validity: Data and Findings

- Triangulation: using multiple sources to confirm correctness
- Findings
 - Use and follow an established analytic method
 - Be aware of your biases (what are you really looking for?)

Ecological Validity

- How do you change the setting?
 - Your presence as an observer/recorder can change behavior
- What can be done to mitigate this?
 - Time
 - Multiple techniques
 - Interviewing people about the past, does it sound like what you are observing currently
- Recognize that it is a possibility, particularly around sensitive issues
 - Build rapport

Reliability

- Whether or not you get the same answer by using an instrument to measure something more than once



Reliability in Qualitative Research

- Repeatability: does that make sense in my study
- Generalizability: how generalizable (many times over the population can it be repeated)

How can we achieve reliability?

The Gear: Pros and Cons of Recording

Pros:

- Full data capture
- Available long-term and to a variety of research team
- Compelling materials in presentations of results

Cons:

- It makes researchers lazy
- It can be invasive, blocked, or unethical

Gear

Warning: Personal opinion

- Everyone should try ethnography by hand
- Best way to experience the method at least once
- Capturing by hand will give you a sense of all the things you need to know about

Now, lets discuss how to observe

Observation Overview

- Introduction to observation
- Types of observation
- Common features of all types of observation
- What should I observe and record?

What is observation?

- Data gathering strategy
- Might involve learning a new language, dialect
- Always involves stalking culture in the wild, learning to adapt to it, and interpret it

Two Types of Observation:

Participant and Non-Participant

Participant Observation

- Joining culture as a full member, participating in activities of culture
- You'll do many/most/all the things members of the group you are studying do
- You'll additionally observe and take notes

Non-Participant Observation

- Sometimes you can not participate
- You watch people doing what they do

Observation Example: Chemotherapy Nurses

- Thousands of different potential combinations of medication in treatment plans
- Information and medical needs are very complex - requires training and education
- Legal requirements on who can do what
- Observation took place in meetings, patient care, and office work

Observation Example: Partial Participation

Studying special education teachers

- Trained for some interventions, but not all
- Not a certified teacher
- Did not participate in all teaching activities, just the classroom ones

Common Features of Observation

Entering the Setting

- Enter the field with written documentation
- Use contacts to help you gain access
- Think through what you will say

Are you known or unknown?

Building Rapport

- Rapport is the ability to get to know people in the setting
- Gain their confidence and trust

Emotional Response to Participation

- Excitement about the project and site
- Culture shock
- Systematic data collection begins
- Cycle of break and collection follows until exit

How do you get emotional studying technology?

Example: Studying teachers

- I missed graduate school!
- I worried that I was missing important classes, information, seminars
- I got really attached to the kids and teachers...
When I went back to graduate school, I missed them!

What do I take notes about?

Recording: Overview

- All of qualitative research turns on note taking/writing
- Basic types of information to record
- Determining information to record
- There are no set rules about what to record

Basic Types of Information to Record

- Space
- Time
- Materials
- Names

Determining What to Record

- Begin with your research question
- Do not overly constrain yourself at first
- Take notes on
 - What's directly relevant
 - What strikes you as interesting
 - Everything else

The Process of Recording

- You are the instrument: Your data are only as good as you are.
- Building explicit awareness
- Building memory

Recording in-vivo and afterwards

- Sometimes it's possible to record in-vivo
- Other times it must be done after the event
 - Write down the important things first
 - Then replay the day and slot them into order (best with word processor)

Types of Recording

- Jottings
- Diary
- Full Notes

Example: Jottings and Diary

8:30 am. Monday, start of the Spring semester.
 ER and Miss B in classroom. Everyone else at buses.
 ER checking email
 MB not happy. GRH: tension between ER and MB
 Hot in room. Windows open. Heater broken.
 Door propped on long wall. Trash behind it.
 DM Arrives... has "wallet" of pictures
 Teacher hands out permission slips to go home (Take copy, PS#3) ← *Unique reference for it and note it in my field notes*

Announcement about bus problem. ER runs from room. GRH: Not sure what's going on
 Other kids arrive
 9:46 ER comes back

Electronic copy of original jottings

GRH: is the way I signify my analytic thoughts, it's where I'm "speaking"

Example: Full Descriptive Notes

8:30am. Alpha Weekly Meeting. Everyone has a two-page spreadsheet that contains a list of items in 8pt font. Each row is a system function; each column a version of the system the department head has responsibility for. The purpose of the meeting is to review the status of each function with respect to each version of the system. A few of the boxes are already filled in, letting everyone know whether the function is implemented for the release. The goal of this meeting is to fill in the rest of the boxes.

10:30am. The meeting is not finished, but must be adjourned, since the department head has another meeting. The spreadsheet remains incomplete. The discussions have been of several forms. Some team leaders announce that they have delivered functions. The box gets filled with "ready." Software that does not work receives more discussion. In some cases, the software depends on hardware or other software from other groups outside the department. The department head takes an action item to "rattle some cages" to ensure that her schedule does not get delayed by non-functional code any further. The cases where one team leader depends on another team leader's code and there are problems (non-delivery, technical incompatibility between the two groups) get two responses. One response is a lengthy discussion of the technical difficulties of the current work. This often gets the other team leaders into longer debates about different technical solutions that might be tried. Others are not discussed, the team leader acknowledges that he has spoken with either just the team leader, or with the leader and the department head. Nothing is written in the box. Nothing more is said publicly.

A note about your field sites

- This is a class on Organizational Information Systems. Your site should have an organization.
- You don't have to have a research question now. You just have to have some general ideas.
- Quant questions can often be made qual with the addition of "how"?

Summary

- Data collection involves observing culture and recording aspects of it
- Observation is a continuum of participation from none to full
- Common features of all types of observation
- Recording includes considerations of what and how to record

Upcoming

- Friday: Discussion
- Monday: No class- holiday
- Wednesday: Machines: Process and Workflow, Data Management
 - START READING NOW!