



Use of Observation in Qualitative Research



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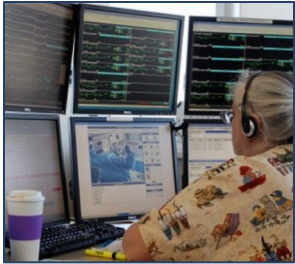
Outline

Observation:

- Basic concepts
 - What is observation
 - Why do observation
 - When might observation be used
 - Potential challenges to doing observation
 - How you do observation
 - Unstructured Approach
 - Unstructured fieldnote example
 - Structured Approach
 - Structured fieldnote example
 - Template (and example)
 - Shadowing
 - An example of analyzing your fieldnotes



What is observation?



- It is a data collection method that entails observing what people do within their environments.
 - View behavior within context- are changes in behaviors context dependent?
 - You document both what people say and what they do- how do people use the resources available within their environments?

Why do observation?

Millions saw the apple fall, but Newton was the one who asked why?? (Bernard Baruch)

- What people say they do and what they do are not always the same.
- Individuals often have difficulty verbally describing in detail what they do on a daily basis.
- Observation allows access to both the trivial or mundane and the difficult to articulate.
- It is a systematic means to capture behavior that other methods may not.
 - Interviews are good for capturing people's perceptions and experiences.
 - Surveys can gather information on known behaviors...
 - Documented data (e.g., chart reviews) collects information that's already been edited by the documenter.

When might observation be used?

There are a variety of reasons for collecting observational data.

- When you are asking a How? or What? type of question
- When the topic is relatively unexplored
- When understanding the meaning of a setting in a detailed way is valuable
- When it is important to study a phenomenon in its natural setting
- When self-report data is likely to be different from actual behavior
- When implementing an intervention in a natural setting

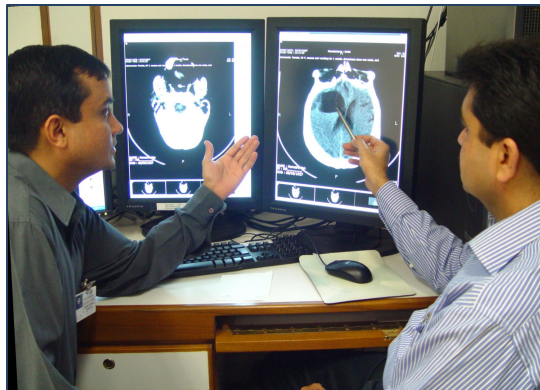


What might be some of the challenges to doing observation?

- Classifying behavior- why observation is best done in conjunction with interviews/focus groups
- Hawthorne effect
- Resource intensive
- Environmental constraints
- IRB

How do you do observation?

- There are several variations on how to perform observations. Some examples are:
 - Unstructured observation
 - Structured observation
 - Shadowing



Study background

- Pilot study
- AIM: Develop a methodology for identifying and characterizing communication events between physicians and nurses to better understand communication patterns on general medical-surgical units.
- Methods: Designed to use sequential qualitative data collection methods moving from the unstructured to the structured.
 - Unstructured
 - Structured
 - Shadowing
 - Focus groups
- 3 observers: 1 clinical, 2 non-clinical
- Positioned ourselves at different points on the unit.
- Observations were generally done in 3-4 hour blocks of time.
- After each observation, type up fieldnotes and meet as a group to discuss what we were finding.

Unstructured observation

- Casting a wide net
- May be done to formulate or refine your research question.
- Your observations are “broad”: you try and take in the whole environment or context.
 - This means you may take up different positions to capture various perspectives.



Unstructured fieldnotes

- The type of fieldnotes you take may be dependent on the context.
- **Physical descriptions** include the area of observed research and if relevant, the larger surrounding environments in order to contextualize your findings.
- **Social descriptions** entail documenting who is there with you, what they are doing, who they are interacting with, what they are saying, and what impact they are having on the space.
 - ❖ Be sure to note the interactions between the physical and social environments.



Example of unstructured observation fieldnotes

Charge RN - phone - look for pt
PT arrives - another staff member
charge RN late for ID rounds
Team on 3rd pt.
Charge RN gets called away
again

(11:23)
Staff refer to white board for
info.
Symbols next to pts. names
Auxiliary staff looking for pts.
Seem to use it most @ have
to ask RNs.
Symbols relate ~~to~~ to pts
status i.e. fall risk, waiting
to be dxed

Example of unstructured observation fieldnotes

- The charge nurse took one of the portable phones off the nurses station and said that she was going to look for a patient. But, before she made it off the unit, patient returned with another hospital staff member pushing him in a wheel chair. **This made the charge nurse late for the interdisciplinary rounds.**
 - How often does this happen where the RN cannot attend interdisciplinary rounds?
 - What impact does this have on information flow?
- **It seems that the electronic white board is used quite often by unit and ancillary staff to see which rooms patients' are in.** They have symbols by their names that tell special circumstances such as fall risk or waiting to be discharged.
 - Who updates the white board?
 - How useful do staff find it?
 - What other information could it contain that might improve communication?

Structured observation

- Unstructured observation often leads to a more structured approach.
- Structured observation is a form of observation that looks at a specified group of people, activity or event.
- The aim is to understand why they do a particular thing, think a particular way or interact with others in a particular manner.
- More likely to use a “templated” approach to data collection.

Example of structured observation notes

- Face-to-face communication- MD asks RN1 a question and they start talking about a patient. RN2 walks up and they start talking about who has which patients. **Both RNs start giving MD updates on the patients.**

RN1- [Patient1] is having a hard time sleeping.

MD- I want neuropsych to see him. After that, I might be able to prescribe something.

RN1- [Patient2] spinal exam was negative.

MD- Neurosurgery still needs to him.

This exchange lasts 2 minutes. MD finally leaves only after he gets beeped (I assume beep meant that rounds were starting because he came back a short while later with a large medicine team).

Fieldnote template

- Specific outline of physical and social components of interest
- May be developed from unstructured observation results
- Also informed from known components of a structured program or event
- Theories and concepts can be driven by templates and result in focused data collection
- Helpful when data is being collected by inexperienced observers
- Downside- can deflect attention from unnamed categories, unimagined and unanticipated activities that can be very important to understanding a phenomenon and a setting

Example of our study's focused observation template:

Date/Time	Location	Observer	Observation #:
<p>Descriptive notes: Actions and interactions of participants in the activity (who, how, where & when, what)</p> <p>Audience: who's present, what are their roles?</p> <p>Mode- how are they communicating with one another? (Ex. Face-to-face, via medical record, pager etc.)</p> <p>Context- note physical environment, where and when is this interaction occurring? (ex. During education rounds)</p> <p>Content- what is the content of their conversation?</p>			<p>Reflective Notes: Observer comments, thoughts, and questions.</p>

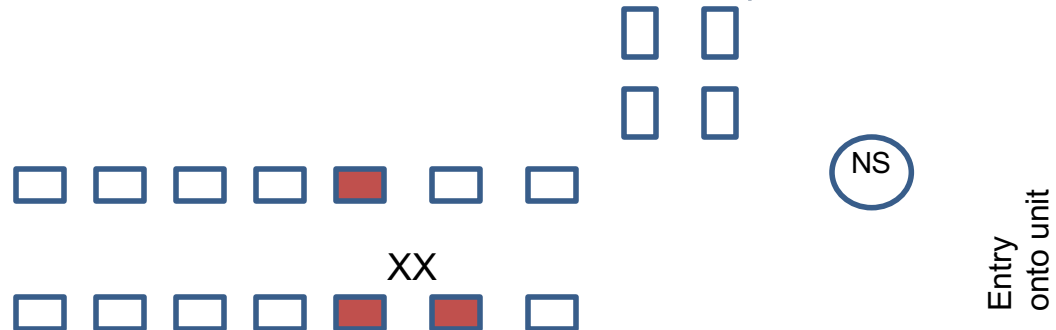
Shadowing



- Shadowing is a research technique which involves a researcher closely following an individual throughout his/her day.
- It may entail multiple shadowing of one individual or shadowing several individuals to capture various experiences.
- Throughout the shadowing period the researcher asks questions which will prompt a running commentary from the person being shadowed.

Example of shadowing observation fieldnotes

On the unit, mid-way down the hall. Floor nurse I am shadowing begins talking to me. I note that she is currently taking care of 3 patients and their rooms are near each other. She is on the computer in the hall between 2 of her patients' rooms and tells me, as she is reading the screen, that she just switched to days and feels like there is a lot of information she misses out on. Dr's notes are put in EMR later in the day. It sometimes doesn't happen until after day shift is over. **She feels like she is not updated on the plan and has to keep checking the EMR throughout the day.** (She feels like she does not get the whole story on the day shift because the notes arrive late).



How we coded our fieldnotes



- Read through our fieldnotes completely (as an aggregate) to get a general idea of the data.
- Used a more inductive approach where our codes were derived directly from the data.
- Used 1-3 words to describe chunks of text.
- Entered into code book with definition of code and examples (can also include inclusion/exclusion criteria).

Examples of codes

- Lack patient information
- Check EMR
- Prioritize workload
- STAT

Findings from fieldnote analysis

Several issues found:

- Nurses do not feel fully informed about the patient and therefore, cannot always make appropriate care decisions without checking with the physician first.
- A lot of time is wasted checking the EMR waiting for order to come in.
- Nurses feel like they cannot prioritize their workload efficiently because they do not know what is coming next.
- There are issues with STAT orders. Nurses are sometimes away from their EMR's for 1+ hours. If it is a STAT order, it might get missed.

For additional information:

Emerson RM, Fretz RI, Shaw LL. Writing ethnographic fieldnotes. 1st ed. Chicago: University of Chicago Press; 1995. 254 p.

Thank You!
Questions?