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Research Methodology

Qualitative Research



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Overview

- Qualitative research includes **different methods** such as action research, case study research, grounded theory, etc.
- Qualitative research is an approach for exploring and understanding a social or human **problem** about individuals or groups.
 - Aim to answer questions about: **what, how, why** (rather than “how many” or “how much” in quantitative research)
- The process of research involves
 - emerging **questions** and procedures,
 - **data typically collected** in the participant’s setting,
 - **data analysis** inductively building from particulars to general themes, and
 - the researcher making **interpretations** of the meaning of the data.
- The final written report has a flexible structure.

Why Use Qualitative Research

Because other research are likely to be constrained by:

- the inability to establish the necessary research conditions;
- The unavailability of sufficient data;
- The difficulty in drawing an adequate sample of respondents and obtaining a sufficiently high response rate; or
- Other limitations such as being devoted to studying the past but not ongoing events.



Example

You want to lobby for better access to health care in an area where user fees have been introduced, you might first undertake a cross-sectional survey which tell you that 20% of your population does not have access to care.

This is essential information, but you might also have a number of other questions that the survey can't answer very well :

- What are people's experiences of user fees?
- What other barriers exist to accessing health care?

(help you to generate hypotheses that can then be tested by quantitative method)



Examples of Qualitative Research

- What we have been aware of
 - Case study: studies a phenomenon in its real-world context
 - Action Research: emphasizes the researcher's adoption of an action role or an active collaboration with study participants
 - Grounded theory: assumes that the natural occurrence of social behavior within real-world contexts is best analyzed by deriving “bottom-up” grounded categories and concepts.
- We will look into the detailed study of grounded theory



Case Study Research

- In a case study a phenomenon is examined in its natural setting, by multiple methods of data collection to gather information from one or a few entities as people, groups or organisations defines a case study as follows:
 - a study that investigates a contemporary phenomenon within its real-life context, when the boundaries between the phenomenon and context are not clearly evident.

(We will study more about case study later)



Six General Skills for Qualitative Research

1. **Listening:** able to take in large amounts of information about the people and the environment;
2. **Asking good questions:** accurate and continuous questions to collect credible and critical information;
3. **Knowing about your topic of study:** sufficient knowledge about your own topic of research: problem, solutions and expectations;
4. **Caring about your data:** carefully handle your data and documents;
5. **Doing parallel tasks:** work on multiple tasks at the same time;
6. **Persevering:** prepare for frustrations, uncertainties and even unpleasanties.



Ethical Challenge:

- Fairly examining all of your data: what data? how much data? how to exclude unnecessary or negative instances?
- Codes of Ethics: guidance about the research integrity
- Research integrity: Your work can be trusted as representing truthful positions and statements.
- Obtain approval from an institutional review board for all studies involve human participants.



Challenge of Starting a Qualitative Research

- Data collection: own data collection
- Originality: own ideas and words

To start-up, you need consider four essential features:

1. A topic (what are you going to study?);
2. Literature review (what are the research issue and methods?);
3. A data collection method (how are you going to collect the data?), and
4. A source of data (where are you going to get the data that are to be collected?)



Research question

WHAT is the question that you want to answer?

1. Has this research already been done? (Literature review)
2. Is this a problem that research can address?
(some problems are clearly problems of funding, or management, or politics, rather than knowledge. Be careful not to be persuaded to do research just to put off managing a problem where the solution is already known)
3. Is a qualitative approach appropriate?
 - Understand the perspectives of participants
 - Explore the meaning they give to phenomena
 - Observe a process in depth ...



Research proposal

Aims and Objectives	<p>The WHAT of the study, including broad aim (what you are going to do) broken down into measurable objectives</p> <p>Example:</p> <p>Aim: To identify preferred sources of health care in X area.</p> <p>Objectives: To interview 30 mothers from 3 villages. To identify where they sought help for their last illness. To identify where they sought help for their child's last illness.</p>
Background	<p>WHY this is an interesting, important or policy relevant question, and what we already know about the topic.</p>
Methods	<p>HOW, with a detailed description of data you will collect. This includes: the setting; the participants (your sample); how you will recruit them; how you will collect data; plans for analysis</p>
Ethical issues	<p>Ethical issues raised by this study, including whether there is a need for ethical appraisal, and how you will address them.</p>
Resources	<p>Costs of the project, e.g.:</p> <ul style="list-style-type: none"> Travel expenses Salaries of staff Accommodation Stationery <p>Other resources needed</p> <ul style="list-style-type: none"> Skills: interpreting/translation data input/help with analysis
Time scale	<p>How long is it going to take? Identify key milestones, such as completing data collection, analysis, report-writing, holding meetings for stakeholders.</p>
Dissemination/output	<p>Who will you target and how do you want to disseminate your conclusions?</p> <p>Possible dissemination:</p> <ul style="list-style-type: none"> Internal reports; External reports; Conferences; Workshop (internal/external) <p>Possible target audience:</p> <ul style="list-style-type: none"> MSF, including home societies; Other NGOs; Academics; Governments; International institutions; Community – local, and more global

Data Collection Methods

- Interviewing;
- Observing;
- Collecting and examining; and
- Feeling.



Data Collection Methods

EXHIBIT 6.1. DATA COLLECTION METHODS AND TYPES OF DATA FOR QUALITATIVE RESEARCH

Data collection method	Illustrative types of data	Specific examples of data
<i>Interviewing and conversing</i>	Language (verbal and body)	Another person's explanation of some behavior or action; a recollection
<i>Observing</i>	People's gestures; social interactions; actions; scenes and the physical environment	Amount and nature of coordination between two people; spatial arrangements
<i>Collecting</i>	<i>Contents of:</i> personal documents, other printed materials, graphics, archival records, and physical artifacts	Titles, texts, dates, and chronologies; other written words; entries in an archival record
<i>Feeling</i>	Sensations	Coldness or warmth of a place; perceived time; interpretation of other people's comfort or discomfort



Interviewing

- Structured Interviews: formal questionnaire and procedure
- Qualitative Interviews: maybe no questionnaire but just a mental framework of study questions, not try to adopt any uniform behavior or demeanor for every interview.
- Interview a group of people
- Focus group interview: participants have some common experience or views



Asking questions

- Start with a general question to orientate interview to the topic
- Gauge the level at which you need to express yourself, the type of language that you should use so that people you speak to understand you and do not feel intimidated by complex vocabulary or patronised by a simplistic one either
- Use everyday vocabulary, don't use technical words or overly complicated ones
- Put more sensitive questions towards the end
- Ask open questions, i.e., requiring more than 'yes' or 'no' in answer



- Ask neutral questions. For example do not ask: ‘why haven’t you had your children immunized’ but rather ‘how did you decide whether or not to immunise your children’
- Use concrete rather than abstract questions. For example ‘think about last time you were pregnant. What did you like about services then?’, rather than ‘what do you think about ante-natal services?’
- Use concrete events to help people remember. For example, ‘after your last child was born’ or ‘the day of the earthquake’, rather than ‘January the 3rd’

Observing

- Systematic observation: a formal instrument and the identification of a specific set of occasions for making the observations.
- Deciding when and where to observe
- Deciding what to observe: individual people, interactions between people, actions, physical surroundings



Collecting and Examining

- Collecting objects related to your study topic
- Examining the collected objects and consider how the collected material is likely to fit the rest of your study



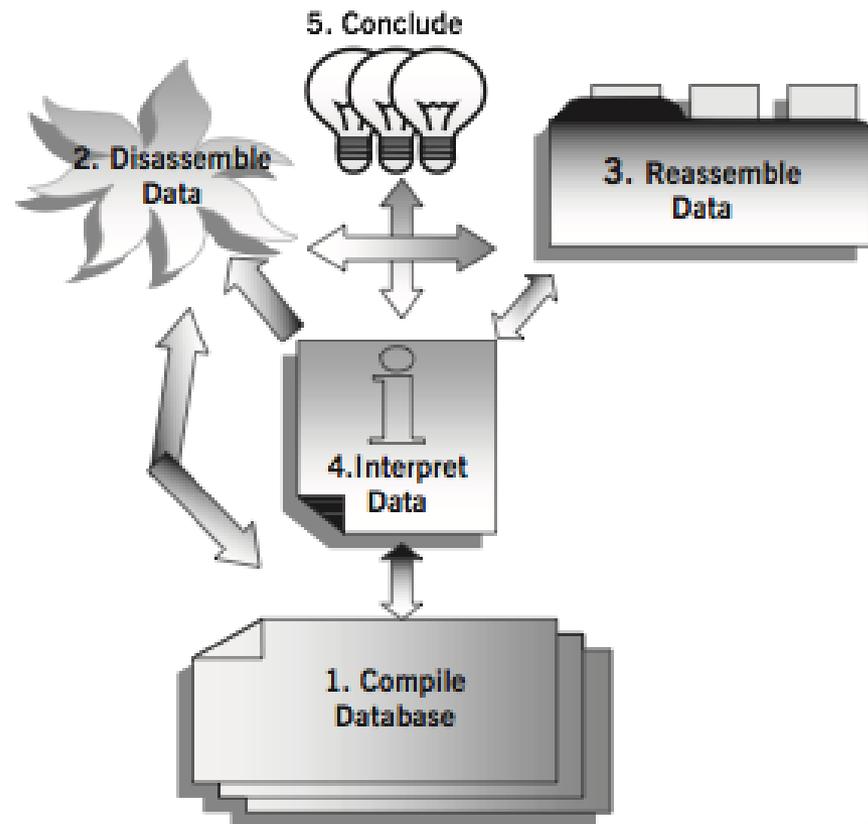
Feeling

- Using feelings to represent data about the environment (warmth, coldness, noisiness, quiet, etc.) and other people.
- Record your feelings and describe them as the events, behaviors, or conditions



Analysing Qualitative Data

- The analysis of qualitative data usually moves through five phases
 - Compiling,
 - Disassembling,
 - Reassembling,
 - Interpreting, and
 - Concluding.



Compiling

- Putting them in some order.
- Compiling and sorting notes from your data collection
 - The objective is to organise your qualitative data in a systematic fashion before formal analysis starts
 - More orderly data will lead to stronger analyses and ultimately to more rigorous qualitative research.
 - The finished compilation might be considered as a database



Compiling

- A data dictionary contains the definition of each field and entries;
- A glossary help to define the terminologies;
- Put your data into a consistent form and separate the data into some set of records
- Using computer software to compile your records



Disassembling

- The second phase calls for breaking down the compiled data into smaller fragments or pieces
- The procedure may (but does not have to) be accompanied by your assigning new labels, or “codes,” to the fragments or pieces.
- The disassembling procedure may be repeated many times as part of a trial-and-error process of testing codes.



Coding

- Coding is the process of organising and sorting your data.
- Codes serve as a way to label, compile and organise your data.
- They also allow you to summarise and synthesise what is happening in your data.
- In linking data collection and interpreting the data, coding becomes the basis for developing the analysis.
- It is generally understood, then, that “coding is analysis.”



Coding

- Grounded theorists have defined three types of coding.
 - Disassembling (open coding or level 1 coding)
 - Reassembling
 - axial coding (level 2 coding),
 - selective coding (level 3 coding).



- In most qualitative research, the original text in a set of field notes and therefore your organised database will consist of specific items,
 - such as field actions and events, objects, and specific opinions, explanations, and other views expressed by field interviewees.
 - Associated with these items will have been highly contextualised details,
 - such as the time of day, the place, and the people involved in the item.
 - Each item will therefore be unique.



- The purpose of coding: moving collected data to a slightly higher conceptual level.
- This higher conceptual level will enable you later to sort the items from different records in different ways,
 - such as into similar and dissimilar groups.
 - Once sorted, you can examine the related features of these groups and gain insight into them.



Open Coding

- The nature of the initial codes, which can be referred to as Level 1 codes or open codes
- These codes can stick closely to the original items, even reusing the exact words in the original item
- As you progress in doing this first level of coding, you may start to think of ways that some of the Level 1 codes relate to each other, and your next goal is to move incrementally to an even higher conceptual level by recognising the categories within which the Level 1 codes may fall.
 - Your coding therefore proceeds to a second and higher set of codes, which can be referred to as Level 2 or category codes.



Open Coding

- The analytical process through which concepts are identified and their properties and dimensions are discovered in data.
- Data are broken down into discrete parts, closely examined and compared for similarities and differences.
- Then theory building occurs through conceptualising which is an abstraction of the data, doing comparative analysis to find common characteristics of objects.
- The concepts are then categorised into main- and subcategories.



An Example of Level 1 and Level 2 Coding

Illustrative words from original field notes	Initial code (Level 1)	Category code (Level 2)
1. "Samantha brought homework home, but she did not always have the right assignment."	Student oversight	Barrier for getting homework done
2. "Whenever Samantha asked her mother to collaborate in doing the homework, her mother was usually busy."	Parent unavailability	Barrier for getting homework done
3. "When her mother was available, she would frequently allow herself to be interrupted and not return to work with Samantha."	External interruption	Barrier for getting homework done
4. "Samantha's teacher reported that Samantha seemed to be exceedingly talented, and the teacher did not readily understand why the homework assignments were such a problem."	Positive teacher's views	Positive expectations (for getting homework done)
5. "Samantha expressed enjoyment in doing schoolwork and looked forward to her homework assignments."	Positive student's views	Positive expectations (for getting homework done)



Open codes

Code 1 Code 2 Code 3 Code 4 Code 5 Code 6 Code 7

Axial codes

Category 1 Category 2 Category 3

Selective codes

Pattern 1 Pattern 2

Ground Theory

Reassembling

Find patterns from open codes

- Do the emerging patterns make sense?
- Are they moving you to a substantively important plane?
- How do the patterns relate to the concepts and hypotheses entertained at the outset of your study?
- Do the patterns become more complicated or expansive when you review additional items from your database?



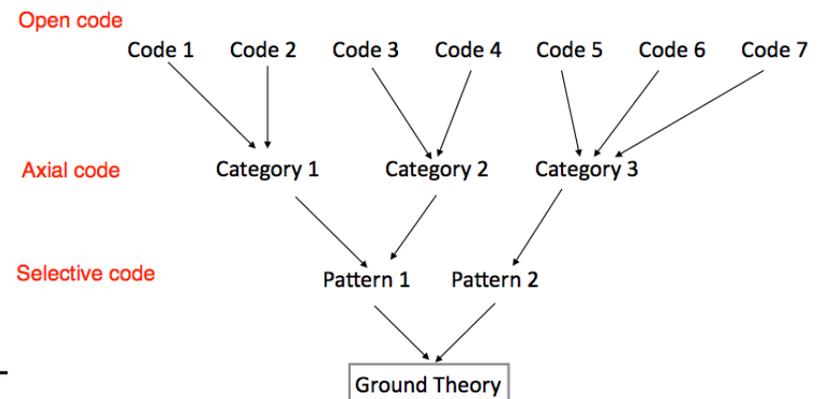
Reassembling

- Creating hierarchical arrays: pull together a large group of similar items at the next level, similar concepts can be put into the same group
- Using matrix: a table of rows and columns. Rows represent one dimension and the columns represent another (such as action at different time).
- Other types of arrays: multiple dimensional matrix



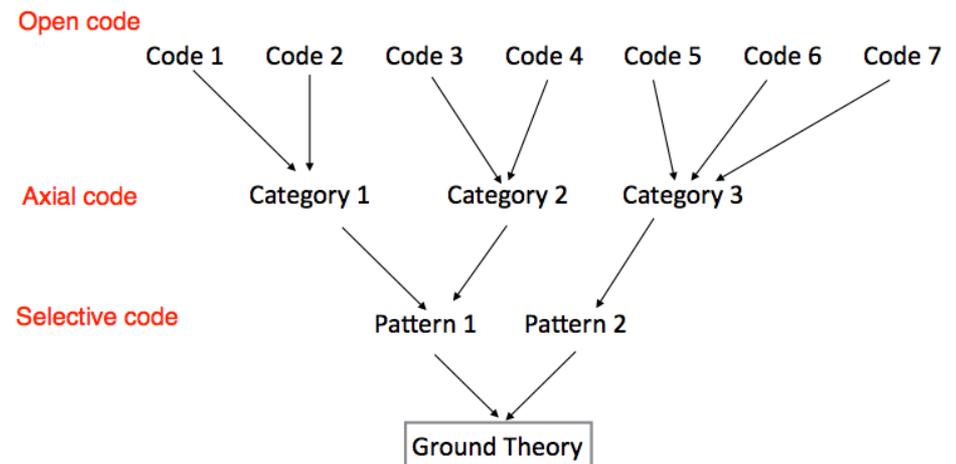
Reassembling

- The second phase (Axial Coding, Selective Coding) is then followed by reorganising the disassembled fragments or pieces into different groupings and sequences than might have been in the original notes.
- This third phase may be considered a reassembling procedure. The rearrangements and recombinations may be facilitated by depicting the data graphically or by arraying them in lists and other tabular forms.



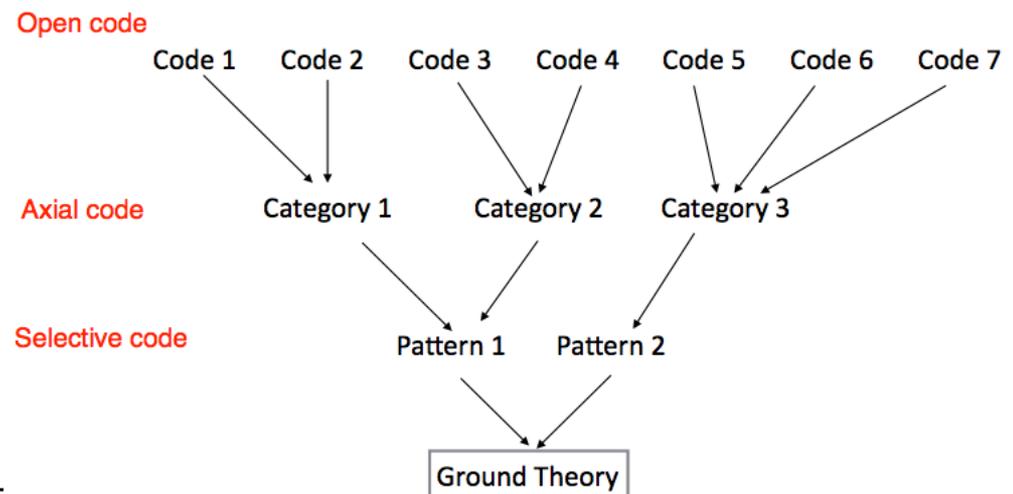
Axial Coding

- The process of relating categories to their subcategories, termed “axial” because coding occurs around the axis of the category, linking the categories at the level of properties and dimensions.
- Categories are more related to their sub-categories, to form more complete explanations of the phenomenon done in a systematically way.



Selective Coding

- The process of integrating and refining the theory.
- The categories are integrated and refined and relationships between them are recognised.
- Integration here involves identifying of the central or core category which is the main theme of the research.
- It will represent the analyst interpretation of what the research is all about.



Using arrays to help reassemble data

- Creating hierarchical arrays.
- Designing matrices as arrays.
- One common way is to build **hierarchies**, with the most concrete database item at one end of the hierarchy, a more abstract concept representing the concrete items at a higher level, and so on.
- Most often, each level of the hierarchy helps to pull together a larger group of similar items at the next level below.
- The hierarchy also can suggest associations across groupings.
- For the coding option, the hierarchy can simply be seen as an arraying of Level 1 to Level 3 codes and concepts; for the noncoding option, a similar hierarchy can be developed.



Coding Example

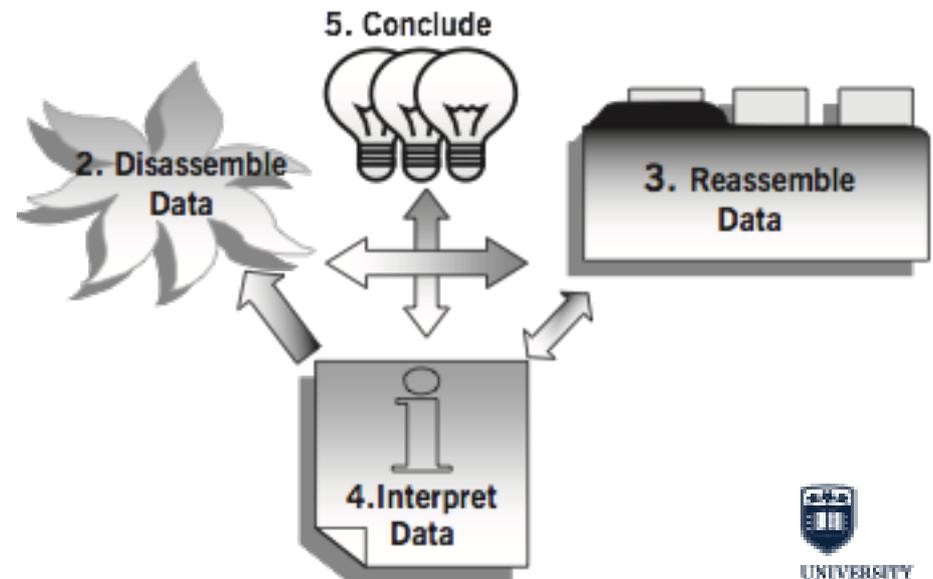
Open code	Properties	Examples of participants' words
Wanting experiential learning	Seeking credentials Feeling ambitious Seeking excitement Being eager	Seeking experience Ambitious Hungry for responsibility Want to be the next big thing Driven Ready to roll Always looking for a new thrill Grow quickly Learn things on our own
Pioneering social media and easily adapting to change	Being comfortable with social media Wanting to lead Creating and embracing new ideas	Not being afraid of technology Risk-taking Being fresh Creating and accepting new ideas Embracing a rapid fire speed Being creative
Feeling entitled due to unique qualifications, as compared to previous generations	Coming equipped with a public relations education and several internships	Mostly PR majors instead of majoring in other fields Being educated in public relations Starting jobs with several internships under the belt Having a great foundation from majors and internships

Craving immediate feedback and being motivated by feeling appreciated	Desiring attention Wanting to impress Wanting a mentor	Want to feel valued and appreciated Want to be recognized Want feedback Want to be rewarded for good work
Advocating a work-life balance	Seeking personal fulfillment Recharging by enjoying a rich personal life Being raised to believe they could have it all	Don't want to work our lives away Want to have room for a life outside of work Raised to expect excellence in our personal lives
Possessing the personal skills and characteristics needed	Getting along well with people Being intelligent Valuing ethics	Friendly, sociable Motivated by friendships at work Smart, clever, sharp Ethical

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Interpreting

- After the completion of reassemble data, you need to interpret the result.
- The Interpreting phase even might cause you
 - to revisit the Disassembling phase, possibly to recode some items.
 - The recoded items would then produce new themes in the Reassembling phase.
- Likewise, the Interpreting and Concluding phases also can have a recursive relationship.



Interpreting

- What constitutes a comprehensive or good interpretation:
 - explain how the outcome provides a solution to the research problem,
 - your interpretation fairly represents your data,
 - explain why it is novel
 - compare your interpretation with other works



Interpreting

- Completeness (Does your interpretation have a beginning, middle, and end?)
- Fairness (Given your interpretive stance, would others with the same stance arrive at the same interpretation?)
- Empirical accuracy (Does your interpretation fairly represent your data?)
- Value-added (Is the interpretation new, or is it mainly a repetition of your topic's literature?)
- Credibility (Independent of its creativity, how would the most esteemed peers in your field critique or accept your interpretation?)



Concluding

- Highlight the key results from your research
 - Recall the research problem
 - Novelty
 - Significance
- Point out the open problem
 - You cannot solve it in your research
 - Next step further to your research



Some common criticisms

- Samples are small and not necessarily representative of the broader population, so it is difficult to know how far we can generalize the results
- The findings lack rigour
- It is difficult to tell how far the findings are biased by the researcher's own opinions

