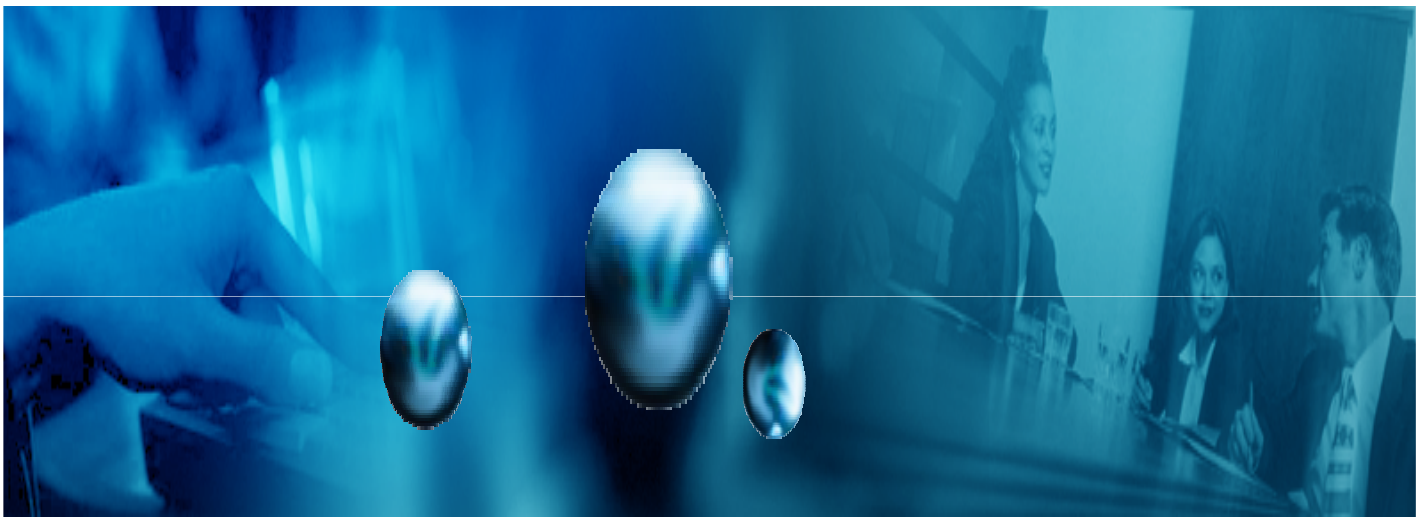
Analyzing Qualitative Data



MS 92

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The nature and scale of qualitative data

- Qualitative data can produce **vast amount** of data.
- Different types of data:
  - Observational notes
  - Interview and focus group transcripts
  - Documentary material
  - Researcher's ***own records*** of ongoing analytical ideas and field diaries

- A transcript of a single qualitative interview generates anything between 20 and 40 single-spaced pages of text.
- Each hour of material can take six or seven hours to transcribe depending on the quality of the tape and the depth of information required.

- Conversation analysis of audio-taped material requires even more detailed annotation of a wide range of features of the talk studied.

- The maintenance of meticulous records is vital.

- Transcripts and field notes provide a **descriptive** record, but ***they can not provide explanations.***
- The researcher has to make sense of the data by interpreting them.

- In most qualitative research the analytical process begins during the data collection phase as the already gathered are analyzed and feed into, or shape, the ongoing data collection.
- Compared with quantitative methods, this has the advantage of ***allowing the researcher to go back and refine questions and to pursue emerging avenues of inquiry in further depth.***

- In general, qualitative research does not seek to quantify data, although simple counts can be useful in qualitative studies.

Analysis

- The approach to analysis is influenced by theoretical and methodological perspectives and should relate to the aims of the research.
- Different styles of research may require different depth of analysis.

Data management

- The researcher develops the analysis by moving backwards and forwards between the original data and the emerging interpretation.

Data management

- Manage and make sense of the huge array of data collected (reading and re-reading all the data).
- The data are systematically searched for frequent themes and items of interest such as events or views that are unusual, noteworthy or contradictory.

Data management

- **Labeling needs to be inclusive;** codes are added to reflect as many of the hint in the data as possible, rather than reducing them to a few numerical codes.

Level 1 coding

- Code **the entire** document
- Code **sentences or paragraphs**
- Code the data **line by line**

Covering up: based on the idea that the participant seemed to be taking steps to hide the frame and their apparent disability.

Shock: based on the client's surprise at the initial appearance of the frame.

'I think it distressed me seeing my leg in such a bad way, I don't know ... it was horrible.'

Level 1 coding

Recuperating: based on the client's desire to get physically well.

'I didn't go out for the first few months . . . partly because I was trying to recuperate.'

Covering up the disability: based on the client's desire not to be seen as physically disabled.

'I never went out in the wheelchair . . . because it attracted more attention I suppose . . . I like people to know that I can get about.'

Level 1 coding

Table 4.1 Open coding using the paragraph-by-paragraph approach

Number 1	Number 2	Number 3
shock	shock	shock
recuperating	recovering	relying on others
covering fixator	covering fixator	covering fixator
covering disability	covering disability	rejecting disability
	objectification	rejecting objectification
	protecting the limb	

Level 2 coding, categorizing

- Compare and assign codes to clusters

Shock
was made up of the labels:
shock, surprise, previous experience, misinformed, getting used to it, focusing on the limb, being like others, regret, becoming aware and comparing with others.

Note: this category seemed to relate to the first perceptions of the sight of the frame on recovery from the anaesthetic. The perceptions were based on and related to previous experience and the information provided by the consenting medical officer. Despite both there was often a sense of shock. Shock does not appear to be the prime phenomenon as this is a static label. While shock was experienced, the main focus was on **becoming aware** of the presence of the frame, and the context in which there were others with frames was important here. Therefore, the label for this category was changed accordingly.

Level 2 coding, categorizing

Hiding it
was made up of the labels:
covering up the frame, fitting in, dressing differently, change in dress code, changes in presentation, being different, changing clothing, being like others and being accepted.

Note: this seems to be about dressing in such a way that the frame is less conspicuous but allowing, where possible, an expression of the self.

Keeping out of the way
was made up of the labels:
avoiding questions, avoiding public situations, avoiding others and avoiding the gaze.

Note: this seems to be about clients not getting into situations in which they may feel objectified. This seems to occur when members of the public stare and ask questions about the fixator and their treatment history.

Data management

- This initial data management is a lengthy and sometimes tedious process, but it allows the researcher to group and link items of data that can then be sorted or arranged under a manageable number of thematic or conceptual headings (categories).
- Allow items fit into more than one category.

- At this stage, there is likely to be considerable overlap and repetition between the categories.
- These categories are further refined and reduced in number by being grouped together.

- Grouping codes and categories together typically entails a process of cutting and pasting.

- Once the data are sorted, there are different ways the analysis can proceed.

Data management

- These move from the broadly inductive to more deductive approaches, but in practice, many researchers find that they move between induction and deduction in the same analysis.
- Sometimes techniques from different analytical approaches are combined to understand the data better.

Thematic analysis

- This can be the simplest form of analysis.
- And perhaps for this reason, it is the most commonly used in health care research.
- Trying to identify relationships between themes.

Thematic analysis

- Thematic analysis often includes themes that are anticipated (through reviewing the literature) as well as those that emerge (that arise directly or indirectly, during the fieldwork)

Grounded theory

- The process is very similar to a inductive thematic analysis but a central feature of grounded theory is that it is cyclical and iterative - the analysis feed to the subsequent sampling, further data collection and the testing of emerging theories.
- **Theoretical sampling**

grounded theory

- In practice, grounded theory is usually a mixture of induction and some deduction, moving between data and theory.
  - Open coding
  - Axial coding
  - Selective coding
  - Memo: ideas about data, definition of codes and their properties, ideas for further sampling and testing
  - Constant comparison

grounded theory

- The researcher can slowly build theory or explanations and at the same time test these emerging ideas.
- It is seldom possible to specify precisely the dimensions or direction of the research at the beginning of the study (problematic).

Developing explanations-the role of the researcher

- The essential tasks of studying the raw data, recognizing and refining the concepts and coding the data are inescapably the work of the researcher.
- No package is capable of perceiving a **link** or defining an **appropriate structure** for data analysis.

- To take the analysis beyond the most basic descriptive exercise requires the researcher's analytical skills in moving towards hypothesis or propositions about the data.

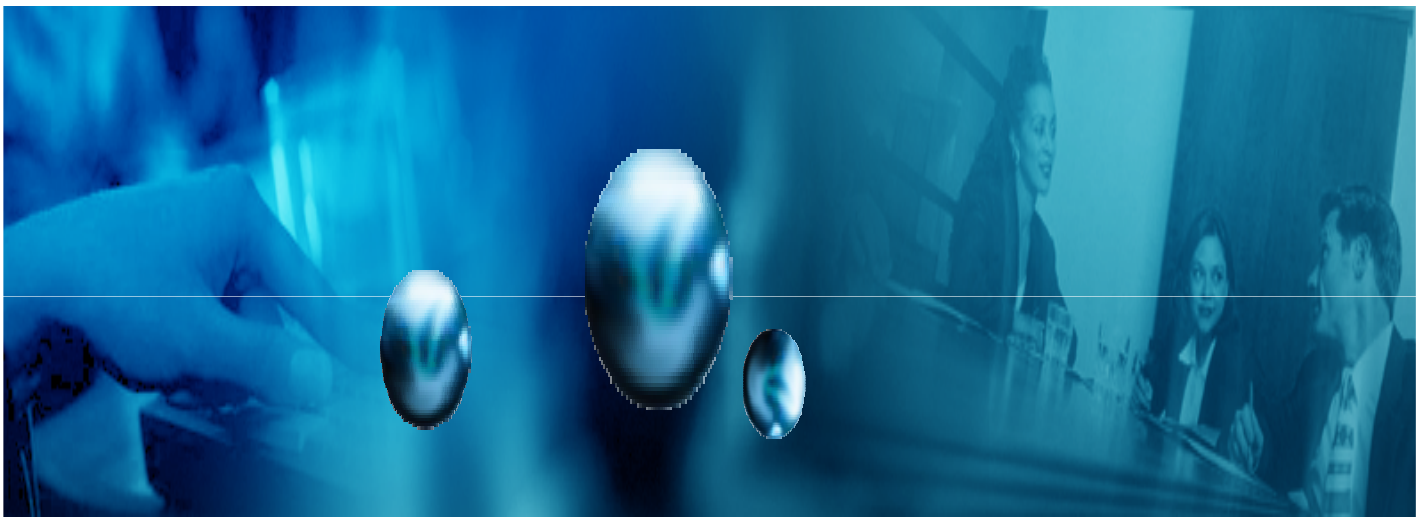
- Building explanations is a difficult process. It requires intimate knowledge of the data, creativity and lateral thinking.
- Knowledge of the wider literature-other studies in the area, relevant theories and sometimes apparently unrelated work-plays a central role in this.

- ***Inter rater reliability***
- Despite the potential limitations of the term ‘reliability’ in the context of qualitative research, there may be merit in involving more than one analyst in situation where researcher bias (a lack of validity) is specially likely to be perceived to be a risk by others.

Conclusion

- Good qualitative analysis relies on **skill, vision, and integrity** of the researcher doing the analysis.
- This may require highly trained and crucially experienced researchers.
- Done properly, it is systematic and rigorous, and therefore labor-intensive for the researchers involved and time consuming.

Thanks!



Any comments?