Chapter 4: Qualitative data analysis

Aims and objectives

This chapter will:

- examine the grounded theory approach to qualitative data analysis
- assess the role of so-called 'deviant cases' in the analysis of qualitative data
- consider attempts to enhance the validity of qualitative social research
- describe the influence of 'post-modernist' social thinking on approaches to qualitative data analysis.

Learning outcomes

By the end of this chapter, you should be able to:

- evaluate the grounded theory approach to qualitative data analysis
- explain why so-called 'deviant cases' are important in the analysis of qualitative data
- examine the criteria of validity as they may be applied to qualitative social research
- compare realist and post-modernist approaches to qualitative data analysis.

Essential reading

Bryman, A. *Social Research Methods*, Chapters 19–22 and pp.498–503.

Further reading

Lewins, A. 'Computer Assisted Qualitative Data Analysis' in Gilbert, N. (ed.) *Researching Social Life.* (London: Sage Publications, 2002) second edition [ISBN 978-0761972457].

Seale, C. 'Grounding Theory' in Seale, Clive (ed.) *The Quality of Qualitative Research*. (London: Sage Publications, 1999) [ISBN 978-0761955986].

Tonkiss, F. 'Analysing Text and Speech' in Seale, C. (ed.) *Researching Society and Culture.* (London: Sage Publications, 2004) [ISBN 978-0761955986].

Wooffitt, R. *Conversation Analysis and Discourse Analysis.* (London: Sage Publications, 2005) [ISBN 978-0761974260].

Web sites

Online QDA at:

http://onlineqda.hud.ac.uk/Introduction/index.php

Works cited

Hammersley, M. 'The relationship between qualitative and quantitative research: paradigm loyalty versus methodological eclecticism' in J. Richardson (ed.) *Handbook of Research Methods for Psychology and the Social Sciences.* (Leicester, BPS books, 1996).

Scott, J. *A Matter of Record: Documentary Sources in Social Research.* (London: Policy Press, 1990).

Seale, C. *The Quality of Qualitative Research.* (London: Sage Publications, 1999).

Silverman, D. *Doing Qualitative Research.* (London: Sage Publications, 2005) second edition.

Silverman, D. *Interpreting Qualitative Data: Methods for Analysing Talk, Text and Interaction.* (London: Sage Publications, 2004) second edition.

Skeggs, B. *The Formation of Class and Gender: Becoming Respectable.* (London: Sage Publications, 1997).

Strauss A. and J. Corbin *Basics of Qualitative Research, Ground Theory Procedures and Techniques.* (London: Sage Publications, 1990).

Introduction

Qualitative data analysis is a large and complex multidimensional subject. In this chapter of the course guide, we will be concerned with the process of coding, the grounded theory method, and the challenge to realist qualitative social research posed by the development of post-modernistic approaches to qualitative data analysis.

Research questions and qualitative analysis

Apart from those researchers committed to the idea that research questions must emerge from the context of data collection and analysis, there are various loosely defined schools of qualitative research that allow us to consider differences in research questions and their implications for the design of research. Here we must address the different 'schools' in qualitative research. (See Bryman Box 13.1 on page 267.)

The school of qualitative research that has been described as **naturalism** seeks an 'appreciation'. Thus, Skeggs' (1997) ethnography of white working class women sought to describe 'the experiences of the marginalised'. The production of appreciative accounts of cultures and behaviour is often from an implied realist position. The author rarely offers the possibilities of alternative interpretations and this implies a view that there is only one true version of social reality. Others may present such alternatives in subsequent attempts to replicate appreciative ethnography.

Qualitative research is often used to investigate problems defined by radical constructivists and more recently **post-modernist** social thinkers. Here the possibility of authoritative accounts of the social is questioned and the research question becomes 'How are such authoritative accounts constructed?' Here the focus shifts from the immediate descriptive analysis to a more abstract account of the methods used by people, or for instance agencies of the state, or professionals to construct interpretations of the social. In discourse analysis, for instance, the research questions are concerned with the way certain versions of the social are produced rather than others.

Studies of the ways in which authoritative accounts are produced include that by Garfinkel (1967) in his **ethnomethodological** study of jurors. Faced with coming to an authoritative judgment as to the guilt or innocence of the defendant, jurors are keen to display an uncommon interest in all the evidence irrespective of its possible relevance to their verdict. This display of non-selective neutrality allows them to display their verdict based on the entire body of evidence and not on the selective evidence that might have confirmed their initial hunches as to the defendant's guilt or innocence.

Similarly, Bryman (2004, 372) summarises research on the interpretative repertoires that can be detected in the analysis of 'official' and informal accounts of the research process produced by natural scientists. Official accounts used what Kaplan, in writing about social science research, called a reconstructed logic and the informal accounts referred to the logic-in-use.

Discourse analysis conforms to the model of the qualitative research strategy described in Chapter 1 as 'constructionist'. However, like ethnomethodology the interest is not on the reality of what is said about the social but on the linguistic methods or devices that are used to construct reality in a certain way. The interest might be, as in the work of Foucault, in how these constructions serve powerful interests such as those of the State. Discourse embodies constructs that reflect power relationships. Research in this tradition finds it difficult to privilege researchers' accounts of the social over those in the social context they are studying. The focus on the deeper structures of rules and methods for constructing authoritative accounts distances them to a degree from this problem of 'privileging' knowledge but not entirely.

This post-modernist approach has come to be known as the 'turn to language' in social research. Rather than use language simply as a means by which the research can access the subjective world of those being studied, the focus of analysis is on the use made of language and the rules governing the use of language. The question changes from 'what kind of culture is described in these texts?' (e.g. interview transcripts, documents etc.) to 'how is language used to construct a particular view of the world?'. Or in conversation analysis, how is it decided who speaks and how is turn-taking organised? Rather than thinking of language as neutral, descriptive 'talk', language should be seen as rhetoric or persuasive speech. The most powerful rhetoric is the one that claims not to be rhetorical but rather claims to speak 'scientifically'.

Activity: what are scientific repertoires?

Using Bryman's description of this study (2005, 372–3), supplemented by Wooffitt (2005, Chapter 2), provide a summary account of the aims and findings of Gilbert and Mulkay's study of scientists' use of 'empiricist' and 'contingent' repertoires when presenting their research to others. In your summary try to categorise aspects of this study under the headings provided in Box 17.5 which are the four prominent themes in discourse analysis.

The identification of methods of constructing realities tends to beg the further question as to when and why these are deployed. For example, Bryman (2004, 372) reports that in Gilbert and Mulkay's study, scientists used different repertoires in different contexts. This indicates a contingent relationship between context and repertoire use that might account for a more traditional analysis of institutional contexts, where power and resource relationships may determine what construction results from the use of one kind of repertoire.

Basic qualitative analysis: Coding text fragments

Being an inductive approach, qualitative data analysis begins with a complete set of collected data in the form of text. These texts may be:

- Transcripts of unstructured interviews or of focus group discussions.
- Field notes from an ethnographic study.
- Documents, diaries or life stories.

Nevertheless, in each case the researcher is faced with the task of analysing these large and complex texts.

Before analysis begins, the analyst opens a new diary to record ideas, results and problems as the process of analysis proceeds. The initial stage of analysis is usually a complete read through of the data. This may stimulate theoretical thinking and analytical strategies that will be noted in the diary.

Since it is rarely possible or necessary to analyse all the data there is a process of selection involved. The selection of text for special attention may be arbitrary, or it may be of relevance to an existing or emergent theoretical theme. The criteria for selection of text fragments is likely to become more explicit and if made transparent can be checked for consistency in the selection process.

Without any premature closure, eventually these fragments of text will be taken as instances of more general concepts. These concepts may be closely related to the form of words in the text fragments. In well-defined areas of qualitative investigation, conceptual analysis will allow ready coding of text fragments in terms of a loosely defined or sensitising conceptual scheme, and less well defined concepts coding may proceed in so-called 'en vivo' classification staying very close to the subjects' words.

Grounded theory

The grounded theory method of qualitative data analysis was developed by Glaser and Strauss (1967) to provide a systematic approach to data analysis that would parallel the techniques of quantitative social research such as Lazarsfeld's elaboration paradigm (see Chapter 6). Grounded theory is only one of a range of possible approaches that shares some basic features of qualitative data analysis. However, Bryman (2005, 408) describes it as the most influential general strategy for conducting qualitative data analysis.

Grounded theory is difficult to summarise but it involves the 'open coding' of qualitative texts in contrast to the closed coding of survey answers into categories preformed by the researcher. Codes are attached to text fragments in the data. Grounded theory involves a 'constant comparative technique' where there is comparison between:

- similarities and differences between coded fragments
- coherence and incoherence within categories
- relative importance of categories
- concept indicators and (i) each other, and (ii) existing categories
- existing categories and (i) each other, and (ii) alternative conceivable categories.

In grounded theory there is a search for 'deviant cases' in order to develop and refine the theoretical framework. This is an explicit rejection of those who insist that qualitative data analysis involves only the search for instances that confirm a theoretical argument. Some approaches to qualitative data analysis, such as analytic induction, pursue data analysis with the aim of achieving a 'universalistic' explanation that applies in all instances. Becker's study of marijuana users is an example (Becker, 1963). In his definition of stages in becoming a user, he required that every user went through each defined stage without exception

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Although grounded theory is developed in the immediate context of data analysis, once a number of theories have been developed in a series of related empirical contexts it is possible to develop using the constant comparative methods more general theories such as the theory of status passage. Theory development is a key objective whether in context of data or in comparison with other grounded theory results.

The outcomes of a grounded theory method of analysing qualitative data sets may be:

- List of concepts with examples of fragments.

- Linked causal scheme: fragment X in the text tended to result in following fragment Y.

- Linked cluster of attributes: the following types of text fragments tend to hang together: A, B, G, K.

- Linked sequence of stages: A tends to be followed by B then C.

- A typology: the concepts A and B defines types of text fragment.

- Narrative: text fragment types D, H, M link to form a 'story' or account of an event or series of events.

Activity: the outcomes of grounded theory

Read the summaries of grounded theory projects in Box 19.4 and Box 19.5. To what extent is it possible to identify some of the outcomes that are typical of grounded theory research?

How do these studies exemplify the following weakness of grounded theory?

Grounded theory generates concepts rather than theoretical explanations.

Many of the criticisms of grounded theory refer to the difficulties it poses the researcher. It is hard for the researcher to suspend concepts drawn from their knowledge of previous research and theory. This is made more difficult by the need to spell out such a conceptual framework in research applications that are likely to attract funding. A criticism deriving from the rival school of narrative analysis suggests that grounded theory rips text fragments from their context and this can strip them of their precise meaning in the flow of qualitative data. Finally, the division within qualitative data analysis between those who seek to use language and text as a representation of 'reality' and those who are seeking methods or rules for the construction of that reality is beginning to appear in accounts of grounded theory.

One of the difficulties of evaluating grounded theory is that it is a large body of literature which seems to be vague about some procedures. It is also characterised by subtle variations and changes in the presentation of the method by its many advocates.

By analysing the focus group data, it was possible to describe a list of techniques that are used to express 'distance from the virtual identity of a serious reader':

1. trivial context: 'something I read in the dentist's waiting room'

2. trivial reason: '?'

3. trivial content

4. use of laughter – 'its only something to joke about'.

CAQDAS (Computer Assisted Qualitative Data Analysis) makes it possible to manage very large datasets and thus enhances our confidence in the results. Use of software to search for examples of text ensures that the search will be accurate and complete according to a publicly available defined criterion.

Validity in qualitative data analysis

Developments in qualitative methods have attempted to enhance claims for validity by dealing with some perceived deficiencies in qualitative social research as it is published. Among these deficiencies have been:

- the failure to provide detailed descriptions of the research process and the inaccessibility of field notes and/or interview transcripts when these are not placed in archives
- the use of selected 'telling examples' or anecdotalism
- search for and selection of those cases that support the argument
- failure to report how representative the selection(s) are of the whole dataset.

Also of increasing importance in qualitative data analysis are the commitments designed to enhance the quality and validity of the analytical processes. Two trends are particularly important (i) the emphasis on transparency (ii) the emphasis on criteria of validity.

Transparency denotes a commitment of being as open as possible about the process of data collection and analysis. This allows the reader to scrutinise, as far as is possible, the decisions made by the researcher during the research process. Such transparency is reflected in the tendency for most, if not all, qualitative researchers to allow their data to be stored in archives that can be accessed by other analysts. This allows for the replication of analysis and thus 'validation'.

In developing criteria for validity for qualitative social research, there has been an emphasis on the need for transparency. Transparency is a basic requirement since it allows the reader the opportunity to peer into, or at least to imagine, the processes involved in the data collection and analysis. It allows the reader to judge and assess the degree of confidence in the findings and facilitates attempts to replicate data collection and analysis in another context.

The debates concerning validity criteria in qualitative research have centred on whether qualitative research should develop its own criteria of validity. Recent efforts to develop these refer to trustworthiness of the research based on credibility of findings (e.g. respondent validation) and the extent to which the research process can be audited by outsiders ('transparency'). (See Bryman, 2004, 276.)

Researchers must be able to demonstrate that their methods of analysis can claim a degree of 'validity' and that the conclusions are based on evidence that has been subject to a process where it is contested. For example, the use by data analysts of a built-in falsification strategy such as that found in grounded theory where there is a continuous search for data that does not support theoretical themes. Such a process would not be found in reports of methods that involved simply the search for confirmatory evidence: instances of data that supported a theoretical theme.

Others might claim that 'simple counting' and tabulations assist in comparing different social groups and counter any tendency towards 'anecdotalism' in qualitative research. The possibility of simple counting (Silverman) is facilitated by the use of computer assisted qualitative data analysis.

Replication may involve the collection of another dataset e.g. develop ideas for four focus groups then apply the scheme to others. Additional datasets can be defined on theoretical grounds to confirm findings and generate formal grounded theory e.g. develop theory based on men's magazines and

then do a study of women's magazines. Replication might also involve the secondary analysis of an existing dataset lodged at archives such as the ESRC qualidata archive.

Bryman (2004) pays special attention to the use of respondent validation as a means of establishing the validity of qualitative research findings: reporting back findings to those observed to confirm or revise findings in the light of their comments. The researcher's account may be accorded privileged status when the subjects do not understand the research findings.

Where multiple observers are involved or where it is possible for the analysis to be replicated by another researcher in the team, an assessment of the consistency in observation can be made. The use of inter observer reliability to arrive at consistency in coding text across members of a research team is a variable of the quantitative technique of test-retest (see p.75). Similarly, where there are a large number of interviews or other text to be coded the data could be split in half before two co-researchers attempt analysis.

The idea of validity itself suggests that there is a social reality separate from our perceptions of it. The concept of validity is much more important in accounts of qualitative social research, and it can be an important 'resource' for qualitative researchers to consider ways in which they can make claims for validity. As resources, validity criteria raise questions that need to be resolved in the process of social research itself. However, the post-modernist trend can have little regard for matters of validity, for it rejects the idea that rules of research practice govern the production of valid accounts of reality. The so-called 'rules' of research practice are merely 'repertoires' for those who seek to have validity ascribed to the 'reality' within a research community.

Conclusions

In this chapter, we have examined in detail one form of qualitative data analysis, grounded theory. We have also noted aspects of other strategies such as discourse analysis and narrative analysis.

Using grounded theory as an example, we have been able to show how qualitative data analysis attempts to work inductively relating theoretical constructs developed as closely as possible to the constructs present in the data. This is particularly suited to research questions unformed or targeted as areas of the social about which little research has been conducted or where the features make it difficult to use the more structured and restrict techniques of quantitative modelling.

Grounded theory exemplifies a commitment in qualitative analysis to examine and possibly account for all instances. In quantitative research the probabilistic contingency model builds in the possibility of unexplained and residual data that may be neglected in the search for variation which can be explained. Qualitative data analysis seeks to account for all the data or to treat data that does not fit ongoing theorisations as equally important as data that does. This explicit commitment to seek out and analyse 'deviant' cases acts as a counter measure to any suggestion that qualitative data analysis is characterised by a selective search for instances that confirm theory or arguments proposed.

The trends toward combining methods and the re-engagement with aspects of quantitative social research linked to validity and the validation of research results question the idea that quantitative and qualitative

approaches are incompatible paradigms. The debate about methods is not so much one of quality versus quantity, but between those who are willing or not willing to assume that there is a knowable social world out there, independent of our conceptualisations of it, but one that can be observed in its effects. The practice of social research does not require belief in the knowable social world, but only the pragmatic view that asks the question: if we do make the assumption, does it lead us to understand the social world in useful ways that can be acted upon?

A reminder of your learning outcomes

At the end of this chapter, and having completed the essential readings, you should be able to:

• evaluate the approach to qualitative data analysis with special reference to the case of grounded theory

• explain why so-called 'deviant cases' are important in the analysis of qualitative data

• examine the criteria of validity as they may be applied to qualitative social research

• compare realist and post-modernist approaches to qualitative research.

Sample examination questions

1. Outline the grounded theory approach to qualitative data collection and analysis. What are the advantages and disadvantages of this approach?

2. How does discourse analysis alter the use of language in qualitative social research? Answer with reference to one major application of discourse analysis in social research.