8 Analysing Qualitative Data

Katherine Sang and Rafał Sitko

In this chapter ...

Analysing the vast amounts of data generated by qualitative research can be daunting. The purpose of this chapter is to provide suggestions on how to move beyond describing what participants have said, to analysing the data. In this chapter researchers will learn more about the most common approaches to analysing qualitative data, namely, Grounded Theory, thematic and template analysis, discourse analysis and hermeneutics. Situations where each approach may be more suitable are suggested. By the end of the chapter readers should be able to identify which approach is appropriate to their data set.

Coding

Whether working with transcripts of interviews or focus groups, field notes, or any other form of text, researchers will find themselves with large amounts of data, which they need to make sense of. Reducing qualitative data into more manageable 'chunks' underpins most forms of qualitative data analysis. Experienced researchers often refer to this as the process of 'coding' data, with each code labelling or categorising parts of the dataset.

These codes can be developed a priori (before) or posteriori (after) data collection. With the former, codes will often be drawn from the literature and underlying theoretical framework. The latter refers to codes which emerge from the data itself, often associated with Grounded Theory. In contrast, template analysis (discussed later) allows for both a priori and posteriori codes. The remainder of this chapter details various approaches to coding

data. What all approaches share is a careful reading of the text, for example, interview transcripts, the identification of themes and tensions within the data. There are a number of types of codes which researchers may use. The most familiar of which are open, selective and axial which are outlined in Table 8.1.

Table 8.1: Examples of types of codes (adapted from Gilbert, 2008).

Type of code	Description
Open	The breaking up of data into chunks or parts. May require the coding of each line of data (for Grounded Theory) Identification and refinement of concepts
Selective	The identification of relationships between codes, for example, a central category (or higher level code) and the codes related to that.
Axial	The rebuilding of data through the identification of links and cross links between the codes or chunks of data

Table 8.2: Sample of focus group data with example codes.

Text	Example codes
From recent experience, when you are a Research Assistant, or Associate Fellow, you are not really involved in the teaching side of it, so you might do one odd lecture here and there. The majority of your time is as a researcher, so you have to constantly be getting in research funding. It can be a horrible way of surviving. You never know if you are going to have a job in ten months' time. You know when that funding will end.	Researchers have little opportunity for teaching Job insecurity
For the E.U one, someone else in the school managed to get funding, but it took him four to five solid months of working on a proposal. You can't spend five months on a proposal, if you are doing research for previous research funding. Horrible way of living.	Time commitment of applications Job insecurity
I don't know if it is different for the teaching side of it, if you have actual contracts that stipulate actual numbers of years, but when you get ten months' funding here, six months' funding there, it is horrible. It is also more work for the admin staff, who have to constantly be working on the research proposals.	Lack of understanding of other staff members' contracts Impact on non-research staff

Table 8.2 shows an example of the coding of a transcript from a focus group, exploring the well-being of staff within universities in the UK. The section of

data outlines one participant's reflections on their working life as a research only member of staff. Codes, such as 'job insecurity' have been attached to sections of text where participants describe the precarious nature of their work.

Once a series of codes has been developed these are then organised into a hierarchy of codes. For example from the table above, a high level code might be 'sources of stress' with lower level codes being 'job insecurity', 'time commitment of applications'. This ordering of codes moves coding beyond describing the data, towards analysis. However, this process can be subjective and it is important to consider whether another researcher would identify similar patterns within the data. For example, look at the quotes in Table 8.2 again and notice that the interviewee says 'horrible' on each occasion. Depending upon the purpose of the research, this could be seen as part of job insecurity or a separate code relating to values, attitude to work or some other theme.

The extent to which qualitative researchers wish to ensure reliability and validity of their research is debatable (Golafshani, 2003). Kreiner et al (2009) provide a detailed account of coding of interview data within a research team. This provides an opportunity to explore avenues for ensuring reliability within data analysis. In their study of how individuals navigate the borders between their working and non-working lives, Kreiner et al (2009:709) set out the following two-step coding system in their data analysis (see Table 8.3).

The advice set out in the table is appropriate to a research team of at least two people. For student researchers, they may be working as sole researchers. As such alternative methods of quality assurance of the coding and analysis needs to be considered. King (2007) suggests that when analysing qualitative data it is important that the researcher is aware of their own effects on the data collection and analysis. This can be achieved through 'reflexivity' and keeping of detailed research diaries which allow the researcher to write down their thoughts and reflections throughout the research process. The following sections of the chapter move to a detailed presentation of particular approaches to the analysis of qualitative data, beginning with 'Grounded Theory'.

Table 8.3: Stages in posterior coding of interview data adapted from Kreiner et al (2009)

Stage	Action
Developing posteriori codes	Each interview transcript read in detail by two of the three research team with codes developed inductively from the data. Codes could apply to words, sentences, paragraphs or passages of text.
	Each researcher coded each interview transcript independently
	Each new code placed into a database with associated meanings and parameters clearly stated.
Joint analysis of texts	The transcripts were analysed in a joint coding meeting where the coding was compared.
	Final codes to be used were finalised.
	There were three scenarios
	Both coders applied the same code to the same section of text (code finalised)
	One coder applied a code to a section of text (second researcher reread the section and reconsidered if the code should be applied – if yes, code finalised)
	No codes placed on the text

Grounded Theory

Grounded Theory, an approach to analysing qualitative data, was developed by Glaser and Strauss in 1967 to assist researchers in building theory from data, rather than using data to test existing theory. The approach has considerable influence in the field of management research, despite frequent misuse, with studies citing a Grounded Theory approach frequently not doing so (Goulding, 2005). In the years following their influential 1967 book, Glaser and Strauss developed differing opinions on the extent to which it was possible to build theory from data without recourse to existing theory. Researchers often successfully draw on Grounded Theory to explore aspects of working life by applying the rigorous data analysis techniques to collected data, rather than to the entire research process. An example of this is Richards (2008) who drew on Grounded Theory approaches to analysing data to explore the role of blogs in employee resistance. For those intending to adopt a Grounded Theory approach, consulting Glaser and Strauss (1967) for detailed guidance is recommended. Silverman (2006:235) provides a