

Qualitative Data Analysis

Introduction

There is a belief amongst some students that the data in qualitative research needs little analysis. This belief may stem from the idea that the data has been collected without reference to hypotheses and not within the confines of a researcher designed questionnaire survey, and this data is expressed solely in the words of the respondents. The belief leads to the conclusion that the responses should be allowed to 'speak for themselves' and should not be subjected to intensive scrutiny, interrogation and analysis. However, this is not the case. If anything, qualitative data needs more attention than quantitative data and may take longer to analyse, largely because the data has usually been produced in a much more open-ended context than quantitative data, so will be much more varied!

The discussion in this section assumes that data has been gathered in a largely open-ended way and that categories for analysis have not been set in advance, but actually emerge from the data, and that the material is being manually analysed, although there is discussion of computer programs that can assist with analysis towards the end of the chapter

The analysis process

Although you have begun the analysis process when summarising the responses to whatever qualitative research technique you have used, be it open-ended interview questions, focus group results or observational material, for presentation of your results, you have not at this point begun the process of explaining your data. Explaining the data is the key analysis activity.

Your first task will have been to try to bring some order to your results in terms of the content, so that you can prepare material for presentation, and this has been discussed in Chapter 7. In the process of preparing your results, you will have been familiarising yourself with the data, as this is the first step to summarising. This should then lead into the more complex stages of the process of analysis. However, part of this initial activity will be attempting to gain at least an interim understanding of your data. If you were involved in quantitative research, you may have set up a study which tests a theory, and so have an obvious way to analyse the material you have gathered, by comparing it to this theory. You may also have decided to use a particular statistical technique in advance of conducting your quantitative study. In this situation, you have a framework to assist in your analysis. It is very unlikely that you will be able to use these forms of highly structured and to some extent 'prepared in advance' analysis in relation to your qualitative data. But nevertheless, you will need to understand what your respondents have provided for you, via interviews, focus groups or observation.

The organising of your material may occur almost naturally, in that you will probably see patterns emerging as you read through transcripts of different respondents' answers. Certain words may be found in the responses, and you will begin to notice words that occur regularly and others that only come up occasionally, but still seem to be important. However, it may require you to note down what at, first glance, appear to be terms that occur often. Nevertheless, you need to be aware that terms that you find when reading through, for example, the first few interviews, may not occur in later ones that you read. So be aware that it is relatively easy to convince yourself that certain terms are being used by respondents, particularly if these are terms that you believed would be presented by respondents, before you started the analysis process, when, in fact, they are not being used as commonly as you believe. Noting down frequently occurring terms, as well as other terms that occur less frequently, will help you avoid forming an inaccurate impression of your data. This organising should enable you to summarise the data. This summarising process is very much an activity that you control but is based on what you have been given as responses, in that the summary terms are likely to be ones that have emerged from your data. A summary term may, in fact, be a concept, theme or issue referred to be a number of respondents. The key factor here is that these concepts, terms, topics and issues have 'emerged from your data'. Having said this, some qualitative researchers do set the categories in advance of conducting their primary research. They are usually experienced researchers who have conducted similar research before, albeit in a different context, and have a good idea of what to expect in terms of responses to their questions. In your case, as an inexperienced researcher, it is usually better to let your summary terms emerge from the data.

Remember, the process of summarising, is likely to be the initial stage in attempting to make sense of your qualitative data. This activity is, in effect, the first part of a key process in qualitative analysis. This will involve the coding and creating of categories in which to fit your responses. The coding or creating of categories is done partly to look for patterns in the data. The way these categories are created is via continually reading and re-reading the data. The ultimate aim is to create fewer and fewer categories. The process by which this is achieved is termed 'constant comparison' (see Glaser and Strauss, 1967). The term clearly suggests what the process actually is. The researcher reads and re-reads the data and the initial categories that have been created are, where possible, combined which reduces the total number of categories. There is usually a time gap between the initial reading and the re-reading, and in the gap, reflection takes place which should help with the reduction in the number of categories.

This process, of creating categories and then reducing them, is illustrated in Case Study 9.1 which is from my own research of primary school children's concept of a tourist.

Case Study 9.1: Children's understanding of the concept of a tourist

This case study is based on research I conducted as part of my PhD. The research evaluated a project focusing on the role of tourism as a topic in the UK primary school curriculum. Part of the research involved an investigation into what children had learned in the project. It had been my original intention to interview a sample of children aged 7-11 years old, outside their normal classroom environment. However, the class teachers indicated that this would be take too long and hence be disruptive to the children's learning. Therefore, instead, I used a questionnaire survey and this was conducted in class. The great majority of the questions were, unusually for a questionnaire, open-ended. Below I discuss just one such open-ended question and present a selection of responses to illustrate the process of constant comparison in refining categories.

The question was as follows: What is a tourist?

A selection of response is shown, to indicate how I went about creating categories and then refining them.

- A holiday maker
- A visitor to another place

- A visitor here
- Someone who comes here for a holiday
- A person who goes on holiday
- Someone who travels overseas
- Someone who stays here
- My gran' when she comes to stay
- Someone who leaves rubbish on the beach
- Someone who comes here from a long way away cos' they like our town

From these responses I considered possible coding or classification categories and initially came up with the following as my summary of children's understanding of the term 'tourist'. Note that, in my attempt to summarise, I use some terms that children themselves did not actually use:

- Non/resident a visitor
- A traveller (domestic/international)
- Motivation to take a holiday
- Accommodation staying here
- Friend/relative (Visiting Friend/Relative category)
- Value judgements polluter/admirer.

When I applied the initial coding categories to all responses, to this question, of the entire sample (the total was 152 children), it became clear that the term 'holiday maker' was used by 36% of the children, 'visitor to another place' by 28% of the children, and 'visitor here' also by 28% of the children.

Therefore, my final summary coding for responses to this question was as follows: 'The major components of the children's understanding of the term tourist is as follows:

- Holiday maker
- Visitor here
- Visitor elsewhere'

To emphasise, an important point in this process of creating categories is that you allow sufficient time. It is usually a very good idea to produce categories then leave these overnight (at least) before trying to reduce them in number. The concept of 'let's sleep on it' is therefore important here. Some researchers may put aside the data with its initial categorisation, for several weeks before looking again and re-reading and re-categorising. You