

4k – A Guide to Qualitative Data Analysis

It is all too easy for a researcher to fall into the trap of thinking that their qualitative data cannot be analysed in the same manner as their numerical data, or is too difficult to work with. In fact, there are a variety of **Qualitative Data Analysis Techniques** for the researcher to use, and while their methodologies may appear a little vague compared to their quantitative partners, logical stages of analysis can be applied to most forms of qualitative data.

Qualitative analysis is all about drawing out firm concepts and patterns from what at first appears to be a wealth of uncategorised behaviours and opinions. The following framework can apply to most forms of qualitative data but a good researcher will adapt it to suit the particular nature of their own data and explicitly tell the reader of their study how and why they are using a particular framework. The framework below has been applied to an interview transcript about out-of-town shopping to highlight to the reader one way of using it.

1. Transcribing

Transcribing data means making a full written record of the data. In the case of interviews, this will mean writing down word for word the responses the interviewee gave to each question and similarly for oral histories or sound files, the researcher should be prepared to note down the script used. Smartphones and tablets may be useful tools for this exercise as many devices have voice recognition apps, which allow the researcher to speak and the device to create speech into a document. Equally, there are a variety of software packages available (often with a free online trial) which can transcribe, code and index data quickly.

For data such as the research diary, observations made in the field, photographs and videos, the researcher should describe their data as impartially as they can, with detailed insight and noting separately any viewpoints drawn by the researcher themselves which are opinion based rather than factual.

Example:

"I used to visit the town centre quite frequently, once a day at least but when the 24-hour supermarket opened out on the Forest Road I kinda didn't need to go into town that much 'cause they sold everything: even got me work clothes there. And they were a lot cheaper too, y'know supermarket prices like. The downside was I had to drive there but when you worked it out it was alright 'cause you weren't paying for parking so I guess it was alright. Now when I do go into town it's for something special, like last week I had to get a birthday present for my niece and she wanted this particular remote control dog thing so y'know... Mum still goes in every week, but that's 'cause the buses to Forest Road don't run too frequent round her way so it's easier for her to keep going into town, plus she knows where everything is. She likes to have a coffee too in the High Street before she heads home, makes a day of it. But for me I don't have time for that 'cause of work, so for me the supermarket does the job, y'know, all in one go"

2. Cleaning

Once the data is fully transcribed it may be necessary to 'clean' the data. This is especially true of interview transcripts which tend to be littered with asides and repeated points. Removing these from a transcript will make the data easier to work with. It is important to note that cleaning does not involve any change to the wording used, only the removal of any parts that are not to do with the nature of the interview or the removal of words that are commonly used in informal speech but are not used for more formal written reports.

Example:

"I used to visit the town centre quite frequently, once a day at least but when the 24-hour supermarket opened out on the Forest Road I didn't need to go into town that much 'cause they sold everything: even got me work clothes there. And they were a lot cheaper too. The downside was I had to drive there but when you worked it out it was alright 'cause you weren't paying for parking. Now when I do go into town it's for something special. Me mum still goes in every week, but that's 'cause the buses to Forest Road don't run too frequent round her way so it's easier for her to keep going into town, plus she knows where everything is. She likes to have a coffee too in the High Street before she heads home, makes a day of it. But for me I don't have time for that 'cause of work, so for me the supermarket does the job, all in one go"

3. Identifying Character Points

A character point in a transcript is any event that clearly informs a point or brings forth a new idea. It may be a comment that identifies a variable or an issue. It is the moment when reading through a transcript that the researcher realises that they have heard something new. It takes some practice to be able to identify characters in a transcript and the researcher may find they need to read a piece a few times before they are confident they have got all the characters covered. In this way, categories for other transcripts may be created and these categories will allow the researcher to carry out further analysis at a later stage.

Example:

Character point in transcript
<i>I used to visit the town centre quite frequently, once a day at least</i>
<i>when the 24-hour supermarket opened out on the Forest Road I didn't need to go into town that much 'cause they sold everything</i>
<i>And they were a lot cheaper too</i>
<i>downside was I had to drive there</i>
<i>you weren't paying for parking</i>
<i>Now when I do go into town it's for something special</i>
<i>mum still goes in every week</i>
<i>the buses to Forest Road don't run too frequent</i>
<i>she knows where everything is [in town]</i>
<i>makes a day of it [in town]</i>
<i>I don't have time [for enjoyment in town]</i>
<i>the supermarket does the job, all in one go</i>

4. Coding

Coding is the process of attaching labels to each of the character points the researcher has identified and effectively 'sorting' the data. This will allow them to collate points from many different transcripts together relatively quickly and aid the identification of patterns within the data.

Example:

1. Frequency of visits to both sites
2. Quality / quantity of goods on sale at both sites
3. Economic / financial considerations
4. Advantages of town centre / disadvantages of out-of-town centre
5. Advantages of out-of-town centre / disadvantages of town centre
6. Differences in use of sites by different demographics
7. Transport issues to both sites

Section of Transcript	Coding
<i>I used to visit the town centre quite frequently, once a day at least</i>	1
<i>when the 24-hour supermarket opened out on the Forest Road I didn't need to go into town that much 'cause they sold everything</i>	1 2 5
<i>And they were a lot cheaper too</i>	3 5
<i>downside was I had to drive there</i>	4 7
<i>you weren't paying for parking</i>	3 5 7
<i>Now when I do go into town it's for something special</i>	1 2
<i>mum still goes in every week</i>	1 6
<i>the buses to Forest Road don't run too frequent</i>	4 7
<i>she knows where everything is [in town]</i>	4
<i>makes a day of it [in town]</i>	4
<i>I don't have time [for enjoyment in town]</i>	5
<i>the supermarket does the job, all in one go</i>	2 5

5. Processing

Once the data has been coded, the researcher can process it. This means that all the data from one code is brought together to see if there is consensus, to identify areas of difference and similarity and to sort theory from real experience. At this stage it is possible to see which categories are linked together across lots of different data sources. Some themes may always be discussed together and the researcher should identify any possible patterns. Key words might be identified and their frequency of use counted to identify areas of agreement: this is known as indexing. It may even be possible to convert some of your qualitative data into quantitative data and process it using numerical data analysis tools.



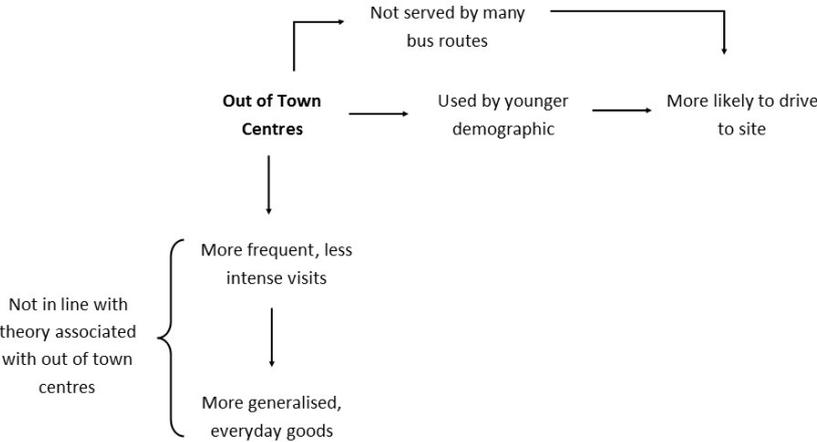
Summaries can also be drawn from the data, with each of the character points forming the basis of the summary. These summaries should include all the sources of qualitative data available.

Example:

“People of working age are visiting the town centre less frequently with the opening of the out of town shopping centre on Forest Road. When they do go into the town centre it tends to be for specialist items or for socialising with friends. Transport plays a key role in people deciding in which place to shop.”

Mapping the data involves drawing a mind map of how certain ideas are linked together across all the sources of data: something that can only be done once coding has occurred. Mapping can be as simple as drawing links between fact and opinion, and between descriptions and explanations within the data. More complex mapping might identify how people, places and events are linked to processes.

Example:



Drawing a matrix may also be a useful way of summarising the information one getting from the practice of coding qualitative data. Different character points are plotted against each other and the researcher uses the data to suggest whether there are degrees of conflict between the two ideas or degrees of cohesion. This works especially well when discussing different user groups.

Example:

	Local land owners	Environmental group members	Housing developers	Local renters
Environmental group members	XX			
Housing developers	O	XXX		
Local renters	O	OO	OOO	
Tourists	O	OO	O	X

X = degree of conflict **O** = degree of cohesion

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6. Just as the researcher would with quantitative data, it is a good idea to have measures in place to check for the significance of any data collected. For any data source it may be possible to design a scale of credibility and a scale of neutrality, helping the researcher to see which sources of data are likely to be most reliable when drawing conclusions.