

# CODING AND ANALYSING QUALITATIVE DATA

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This chapter considers thematic coding as one way of looking at data of the sort often produced in ethnographic work or other qualitative methods. It is easier to make sense of the data when they are divided up into themes, or patterns in the data. Thematic coding can be used for transcripts, field notes, documents, images, internet pages and audio or video recordings. It reduces the volume of the original data and turns it into something meaningful and easy to digest. Sometimes themes may be used as a way of summarising and sharing the data, with selected themes described in reports and papers, illustrated with data extracts. But it is often instructive to move beyond simple reporting of themes, to consider underlying concepts.

In my own work on women who are being abused by their partners, I have produced a simple description of the theme 'hiding the abuse from others', showing for example how some abused women liken their experiences to the normal arguments that 'every relationship' has. This descriptive work should help domestic violence support services to be more effective; for example, it suggests the need to differentiate normal arguments from abuse when talking to abused women. In a separate report, I have subsequently considered something that the women do not say directly, but which I have deduced from carefully analysing a number of linked themes – the way that, by hiding the abuse, they maintain their standing with their families and in their community as women who have successful relationships. This provides a deeper layer of understanding that support services can use.

I based both levels of analysis on a systematic formalised coding process, called *thematic content analysis*, which I describe in this chapter. One impetus for the original development of this

was to help qualitative researchers legitimise their methods, responding to critics who claimed that qualitative research is a softer option than quantitative research. By following the process and then describing it in their reports, researchers can enhance and demonstrate the quality, or validity and reliability, of their findings (see Chapter 30 for more on quality, validity and reliability). It is also helpful in providing novice researchers with a relatively simple approach to analysis.

Thematic content analysis involves looking across the data set rather than within one case. The approach is similar to that used in interpretative phenomenological analysis (IPA; see Chapter 25), and in the early stages of grounded theory development (see Chapter 22), but there are important differences. Simply put, thematic content analysis will often focus on what a phenomenon, event or social interaction 'looks like' to the individuals of interest (their lived experience). With IPA, on the other hand, which is a method used predominantly by psychologists, interviewers are interested in what things feel like. The difference in perspective is taken forward into the coding process, which is otherwise similar. A grounded theorist undertakes thematic analysis, and develops abstract concepts from the themes, but then builds up theory from the concepts.

Other analytical approaches have been developed that involve looking for themes and patterns in the data in very different ways to thematic content analysis, IPA and grounded theory. Semiotic analysis, discourse analysis, conversation analysis, and narrative analysis are considered in Chapters 16, 23, 24, and 25 respectively. These require detailed technical and theoretical knowledge and are not as accessible to the inexperienced researcher as is thematic content analysis. 'Content

analysis' without the thematic prefix (i.e. analysis that focuses on counting the frequency of words or other small bits of data and then looking at the context in which they appear) is different to any of the other techniques mentioned in this section and is considered in Chapter 26.

### Preparation for thematic coding

Before coding, it is a good idea to think about *theoretical sensitivity*. This may be defined as the researcher's sensitivity to concepts, meanings

and relationships within the data, and it comes largely from professional and personal experience. Theoretical sensitivity is also shaped by reading.

There is considerable debate as to how much literature an analyst should read before coding. Practically speaking, it is impossible to do research in a literature vacuum, and indeed a literature review will often inform the design of a qualitative study. However, you may need to do less reading if your approach is *inductive* rather than *deductive*. Box 21.1 illustrates the difference between these approaches.

#### BOX 21.1

### INDUCTIVE AND DEDUCTIVE CODING

Qualitative studies are often *inductive*, which is to say that they begin with a very broad research question, and the final research question and precise themes are suggested empirically from the data.

For example, you may wish to learn more about doctors' working lives but are not sure which particular issues might be important to them. It would be sensible to read broadly beforehand so that you know the sorts of questions to ask when collecting your data, and then focus on more specific topics once these are suggested by the data itself as analysis proceeds.

However, sometimes a more *deductive* approach might be required, with at least some themes developed before you begin analysis, from previous research or theory or researcher intuition and experience.

For example, you may already know that doctors are limited by the amount of time they can spend with patients and wish to explore this further. This might require fuller engagement with the literature before analysis begins to ascertain what is already known and what gaps in knowledge need to be filled. If your research is being undertaken to test, update or expand on an existing finding, for example the way that female doctors in primary care are more likely than their male counterparts to refer patients on for further tests, and how this relates to gendered health beliefs, your codes may be primarily derived from the literature.

By reading and re-reading your data several times before formally coding it – sometimes called *immersion* in data – your sensitivity to its meanings is likely to be enhanced. Keep *memos* (notes to yourself) of phrases and broad impressions that seem significant. During coding you will fragment your data into a number of different parts which then may seem disconnected from the whole. Being able to remember the context from which fragments are drawn, because you have immersed yourself thoroughly in the material, will help you make sense of them later.

### Memos

*Memos* are informal notes to yourself so you may use words and styles you would not draw on when writing for an audience. You can use memos to:

- write down impressions and ideas as a way of 'holding that thought' as you carry on working through the data
- record personal comments about your progress, decisions, difficulties and annoyances (this can be useful later when writing up)

- keep a note of problem codes that need later revision, and ideas that need to be checked with more data gathering
- help you when drafting your report.

Because of their multiple uses, it is a good idea to give memos titles for easy later identification, such as 'Why I changed the topic guide' or 'issues with method'.

To see how memo-writing might work, consider the following extract, which is part of a memo reproduced by Anselm Strauss and Juliet Corbin, about pain in childbirth (the asterisks and italics are in the original and mean something to their author):

Pain is\* part of a labor process, labor of course serving an end – the end of pregnancy, the delivery of the awaited child. Hmm. How do I describe this property? The pain itself is not purposeful, but associated with a *purposeful activity – labor*. (\*\*\*\* I'll note this though I'm not yet sure what to do with this. It doesn't necessarily mean acceptance (though it might to some people), or tolerance, but perhaps it gives the pain a certain degree of predictability? This still doesn't quite capture this phenomenon.) (1990)

### The zigzag approach

Thematic coding is often begun before all the data are collected, in a process of iterative data gathering and analysis, which has been aptly labelled the *zigzag approach* (see Figure 21.1). The idea is for early analysis to inform further data gathering so that gaps in the data are filled or new and unexpected themes unpacked. Ideally, the process ends when no new themes emerge from the data (which is called *saturation of themes*). Here is an example of how this works, taken from a study that involved interviews with men about their experience of having testicular cancer:

An early respondent talked powerfully of his distress at people making 'bad jokes', or referring to cautious people as having no 'balls'. Alerted to this theme, the researcher asked other men if they had ever been subjected to 'bad jokes'. Humour was found to play an important role for men with testicular cancer, and was used by them to demonstrate that they were OK with the diagnosis (which has a very successful cure rate), were confident of recovery, and that they were still 'one of the lads'. (Ziebland and McPherson, 2006: 407)

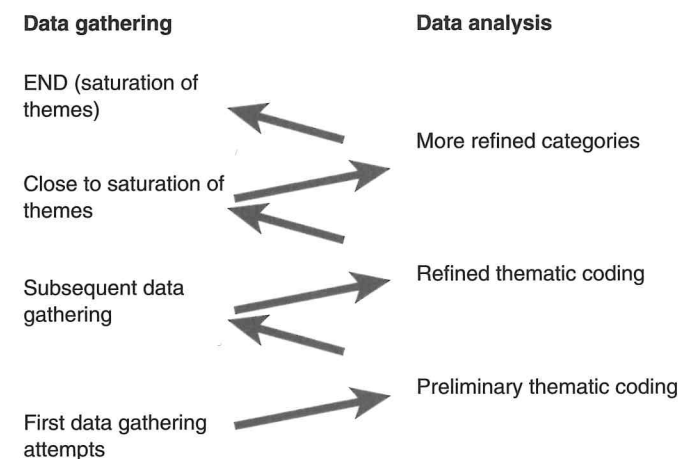


FIGURE 21.1 'Zigzag' data gathering and analysis

With more deductive approaches to thematic coding, the zigzag approach may be redundant, with all data gathered before analysis begins.

### Open coding

Whether you use the zigzag approach or not, it is a good idea to begin by coding only a small amount of your final data and then building your codes up with progressively more data. This

enhances your theoretical sensitivity. Immerse yourself in the first few bits of data and get a feel for what they say. Then the more formal coding can begin. The first stage of thematic coding is often called **open coding**, a term used by Barney Glaser and Anselm Strauss (1967) in their book *The Discovery of Grounded Theory*. Open codes are labels for chunks of data that capture something of the literal essence of the data. An example of open coding from my study of abused women is provided in Box 21.2.

#### BOX 21.2

### OPEN CODING: AN EXAMPLE

Data extract	Open codes
[Y]ou know, there's a couple of girlfriends and we're always saying, what the hell are we doing? But we've been saying that for twenty years now! <i>(laughs)</i> For ten years, we've been saying ... we spend our lives saying, 'Why am I with this man?' and they go, 'I don't know, why are you with him!' 'I don't know!' <i>(laughs)</i> ... and you kind of look around and think, well, what relationship is actually worth staying together ... you know, you think, I know very few ... I maybe know two good ... really good, strong relationships and the rest are kind of just ... muddling through! <i>(laughs)</i> Because I guess that is just being with someone as well, you just ... it isn't going to be plain sailing. But it is where you draw that line and I don't ... I think maybe if [partner] had been more abusive, I would have left. You know, it's a more subtle ... isn't it? If it was a more obvious type of ... you know ... I'd just go.	<p><i>Talking to friends</i></p> <p><i>Jokes about exasperation with men</i></p> <p><i>Reflecting on relationship for many years</i></p> <p><i>Querying being with the man</i></p> <p><i>When relationships are not worth it</i></p> <p><i>Good relationships rare</i></p> <p><i>Muddling through</i></p> <p><i>Relationships not plain sailing (normalising)</i></p> <p><i>Choosing where to draw the line</i></p> <p><i>Abuse too subtle to leave</i></p> <p><i>Abuse not obvious type</i></p>

Coding line by line, or sentence by sentence (i.e. reading each line or sentence separately and seeing if it suggests a code to you) ensures that each part of the data is treated the same way, and thus that representative and also new and unexpected themes may be captured. This does not mean you will identify a code for each

line or sentence, as you can see from Box 21.2, or that a data chunk is the same as a line/sentence of data. Some will be irrelevant to the research question and some will suggest two or more codes, while some codes may develop over two lines, several sentences or even a whole paragraph. Correspondingly, data chunks

may be any size, from words and phrases to whole paragraphs and more.

Unless you are using an entirely deductive approach and have decided on all your themes before you begin analysis, your code names will often be very rough at this stage. You should simply aim to get down a word or phrase that describes the data well and does not involve any interpretation by you. You may find that your open codes are quite repetitive. This is to be expected. For example, in Box 21.2 I have the codes *Abuse too subtle to leave* and *Abuse not obvious type*. I did not try to group these into a code – called *types of abuse* perhaps – during open coding because had I done this too early, I might have missed something in the data. As it transpired, by keeping them separate I was able to see as I added more data that women downplayed the abuse (and so justified their behaviour in staying in the relationship) until it became obvious to others.

Had I combined the codes I would have simply concluded that women left abusive relationships when the abuse became more obvious.

### Inductive and deductive coding combined

Sometimes it is useful to combine deductive and **inductive coding**. You may have a general idea of what you are looking for and use broad, deductively determined codes to home in on the data, and then inductive coding to explore this in more detail. Or you may wish to add to existing knowledge, as in the example in Box 21.3, which comes from a study of antibiotic prescribing in children (Rollnick et al, 2001). Both deductive and inductive codes were applied to transcripts of talk between doctors and their patients (or patient's parent in this example); Box 21.3 shows some of the different codes used and their origins.

#### BOX 21.3

### SOME CODES FOR ANALYSING TRANSCRIPTS OF DOCTOR-PATIENT INTERACTION

Code name	Definition
Elicitprobs*	Moves by doctor to elicit problems parent or child is having, or worries that they have.
Elicitempect**	Moves by doctor to elicit expectations parent (or child) has of consultation. (This does not include offering parents the choice of whether to have antibiotics or not; this is covered by a separate code.)
Elicitaction*	Moves by doctor to discover what parents are doing to alleviate/solve the child's problems with the illness.
Pre-empt*	Pre-emptive strike – where doctor says things that are likely to preclude objections to a 'no' decision. This 'strike' may be renewed after the no decision is announced in order to make the decision secure.
Choice**	Offering parents the choice of whether to have antibiotics or not.
Delayed***	Delayed prescription strategy.
Easy***	Offering patients/parents easy access for a review of situation; e.g. 'I'll see you straight away if you find it gets worse tomorrow'.

Source: Used in a study reported by Rollnick et al., 2001

\* Arose from inspecting transcripts and discussing them.

\*\* Arose from communication skills training philosophy/literature.

\*\*\* Arose from interviews with doctors on an earlier project.

## Inductive approaches: in vivo coding

Inductive codes are often, though not always, *in vivo codes*. This means that the codes are terms taken directly from the data, representing living language and they may include slang and metaphors. Language is rich and evolving, and words may be used in unconventional ways, for example: 'shooting up', a term for injecting drugs used by drug addicts as explored in a study by

Howard Becker (1963); 'Bull and Cow', London Cockney rhyming slang for 'row' or argument; 'wicked', meaning either bad or good depending on your age; 'peng', as current youth talk for attractive. You might realise from these examples that using these terms as codes could alert you to new understandings and new themes that you might miss if you glossed over the precise words used or wrongly assumed that you understood them.

### BOX 21.4

#### IN VIVO CODING: AN EXAMPLE

Naomi Quinn (1996), in her study of American marriages, realised that her interviews were peppered with metaphors, and used them as her initial open codes. She found people expressed their surprise at the breakup of a marriage by saying they had thought the couple's marriage was 'like the Rock of Gibraltar' or had been 'nailed in cement'. They assumed a common understanding that cement and the Rock of Gibraltar signify 'lastingness'. Quinn grouped the hundreds of metaphors in her data into eight linked themes that reflected her respondents' attitudes to marriage and which she labelled: lastingness, sharedness, compatibility, mutual benefit, difficulty, effort, success (or failure), and risk of failure.

By considering Naomi Quinn's approach in Box 21.4, you can see how open codes such as 'nailed in cement' are not interpretive (i.e. the product of the researcher's own interpretation) but feed into later interpretation by the researcher in forming a theme such as lastingness.

In vivo coding helps the analyst to avoid too early interpretation which could result in misinterpretation. Kathy Charmaz (2006) recommends using the *gerund* (words such as 'moving', 'finding', 'doing') for open codes, as this also helps to avoid misinterpretation, focusing attention onto the *actions* that are being done, rather than the *people* doing them. This is important because if you say someone is 'baking a cake' it has a very different meaning to saying they are 'a cake baker'. The gerund helps analysts to see how people have different behaviours in different situations. If instead you label the individual, you might miss nuances in the data. For example, the fact that the individual was baking a cake

might have been extraordinary – perhaps they were stuck at home bored, or they were preparing for a celebration – whereas a cake baker would be expected to bake a cake. As a further example of this, consider the following: in my own research on abused women, I discovered that sometimes the women called themselves 'hard bitches'. I coded this as 'saying they were hard bitches', explored this further and discovered that it did not mean they were hard bitches, but rather that they were uncomfortable with standing up to their partner.

Do not worry if you find it difficult to use the gerund or in vivo codes. Many people prefer to use the type of coding shown in Box 21.3. This chapter provides tips not prescriptions, and you should experiment and choose what approach to coding works for you. But do remember to avoid too much interpretation at an early stage if you are committed to an inductive approach, as you need to allow the data to 'speak for itself'.

## Asking questions of your data

The 'open' of open coding might be taken to reflect both the freedom the researcher has in choosing the coding style they are most comfortable with, and the way they need to be open to whatever the data says. You should constantly ask questions of your data as you code, for example, 'What is happening?' and

'From whose point of view?' The literature is replete with checklists of suggested questions. An example of one such checklist, designed for interviews and focus groups, is provided in Box 21.5. Lists may be constraining if rigidly applied, so only use them as springboards to further thought. Periodically refer back to the research question to make sure you are maintaining your focus.

### BOX 21.5

#### LIST OF QUESTIONS TO ASK OF THE DATA DURING ANALYSIS

- *Words*: How are specific words used, and what do they mean to the participant?
- *Context*: When does the participant raise a topic? Does it relate to anything else?
- *Internal consistency*: Are topics talked about differently at different times? Can this be related to anything?
- *Frequency*: Why are some things repeated more frequently than others? Does this reflect their significance to the participant, and is this because they have problems coming to terms with something, or because they wish to be seen in a certain light? Is it significant that a particular topic is rarely mentioned, avoided or missing?
- *Extensiveness*: How much coverage is given to particular topics (remember that a topic may be mentioned only once but take up half an interview, for example)?
- *Intensity of comments*: What positive and negative words and emphases are used and what is their significance?
- *Specificity of responses*: Do the data describe an actual event or a hypothetical situation? Is the first or third person used?
- *Big picture*: What major trends or topics are there that cut across cases?

Source: Adapted from Rabiee, 2004

Look for patterns in what is missing as well as what is not. Unspoken topics may be attempts at 'impression management' by your research participants (trying to make sure you get a particular impression of them rather than an alternative and probably less desirable one) or may represent taboos. When investigating birth planning in China, Susan Greenhalgh reported that she could not ask direct questions about resistance to government policy but was able to sense this indirectly:

I believe that in their conversations with us, both peasants and cadres [formal birth planning officials] made strategic use of silence to protest aspects of the policy they did not like. (1994: 9)

Alternatively, things may remain unsaid or unexplained because your participant believes they do not need to articulate what they assume everyone knows.

## Getting it down

Researchers have various ways of getting their initial codes down on paper or on their computer. Some people highlight words or parts of images on hard copy with highlighter pens. Others type or write codes in the margin alongside the relevant data in the transcript, document, picture or other data form. Similarly, software for supporting qualitative research allows the researcher to highlight a section of text and then apply a code to it (Figure 21.10, later in this chapter).

Whichever technique you use, it is good practice to number each line of any text at this initial stage, as this will help you when referring to your data later, in quotes, memos and discussions. Software packages may number paragraphs rather than lines.

If your approach is deductive and you knew what your themes were before you began analysis,

this may be all the coding you need to do. In this case, you may choose to do open coding using software, and then to move on to the part of the analysis described later where themes are checked for completeness (perhaps using the concept maps described) and then written up. If you are using an inductive zigzag approach, it may be best not to code into software at this stage. Your codes are likely to change a great deal in the early stages of your analysis, and it can be quite tricky to make radical changes to your coding scheme within software packages.

Your open coding should have resulted in a long list of codes – too many for them to be used as they are. They now need to be grouped together into preliminary categories, then themes. *Spider diagrams* (Figure 21.2) are often useful in organising thoughts about this. By grouping related codes in this way, I can see that several of the codes in the diagram codes suggest

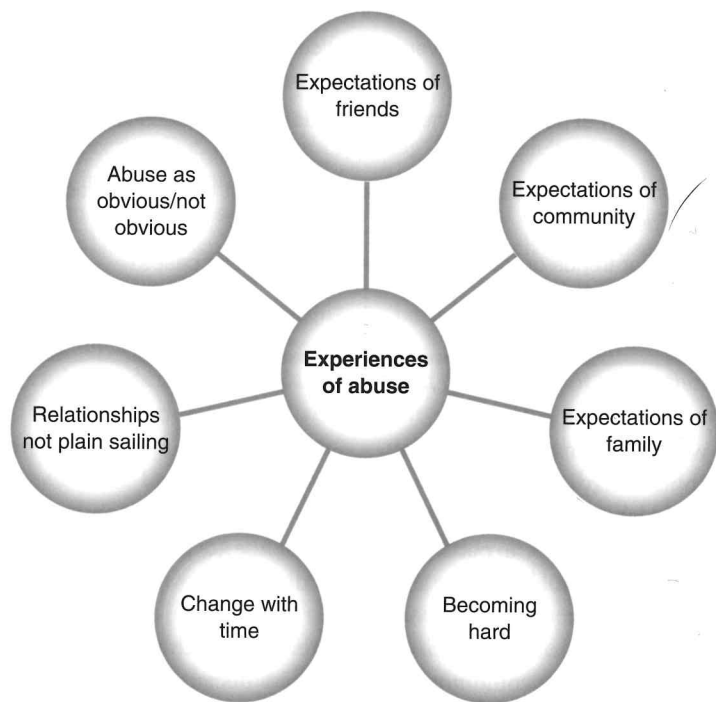


FIGURE 21.2 Spider diagram: experiences of abuse

a category of *playing down the abuse*, several relate to the *expectations of others*, and several relate to *changes in responses to abuse*. This suggests three potential categories that subsume the categories in the spider diagram.

## Developing categories and then themes

### Category formation and the process of constant comparison

Category formation is the second of three stages used in inductive or combined inductive-deductive thematic analysis. It is needed if the analysis is eventually aimed at more than just description, so that it provides themes which contain an explanation or indeed are part of a theory that will bring a new perspective to bear on the problem at hand. The second stage follows some form of coding, such as in vivo or open coding as just described. It involves grouping similar open codes together to form analytic categories. Develop them as your research proceeds using the zigzag approach if you can. This keeps the analysis manageable, and it also makes it more likely that you will spot the unusual and the unexpected, and develop richer interpretations of the data.

In the past, many researchers would physically cut their data into parts representing the different open codes, then group these into categories on a large table, on the floor, or pinned to the wall. Each piece of data might be accompanied by information about its source and its location in the original or transcript. With the advent of Microsoft Word and other word processing tools, and bespoke software such as *NVivo*, *Atlas.ti* or *MaxQDA* that supports qualitative data analysis, this is increasingly done on a computer. However, many researchers still prefer the physical approach.

Once you are happy with your categories, you should operationalise them by defining them so

that subsequently you or others can understand what you have done. Operationalisation means that you turn an abstract idea into something more concrete. This is particularly useful for write-ups and when you share analysis with others, have someone else undertake parallel coding of some data as a quality control measure, or return to your analysis after a long absence. The following is an operationalised category called *ending relationship* from my study of abused women:

*Ending relationship*: includes both temporary and permanent endings. Considers reasons, feelings and agency, coming back, and also continued contact that is no longer an intimate relationship. Excludes continued contact within an intimate relationship but the couple can live in the same accommodation if they have separated.

In the above example, the last phrase about the couple continuing to live together without being in an intimate relationship was added after I discovered two cases of this happening in the data. It is usual for your categories, and therefore operationalisations, to change as you gather more data and continue to analyse. You need to check that categories fit new as well as already analysed data rather than checking that the data fit the categories – avoid trying to force data into the categories! The aim is for each category to be distinct, although it is almost certain to be related to other categories. A later section of this chapter describing typologies and careers will demonstrate how relationships between categories can be used.

The process of category formation requires *constant comparison* of all the bits of data within a category with each other, and constant comparison of the data across categories. In other words, each time you code and then categorise a bit of data, you need to check it against all the other pieces of data in its designated category. This may lead you to add a

category, subsume one with another or rename it, or to change your understanding, as I did in the example above. Constant comparison of a gradual trickle of data ensures that your interpretations remain grounded in the data and that you are not so overwhelmed with data that you cannot see the finer detail.

In another example from my study of abused women, I decided that the code *saying they were hard bitches* belonged to the category *fighting the abuse*. Originally, the definition said this category contained examples of rebellion and anger and empowerment, and so it had to be amended to encompass the discomfort some women felt in fighting back and the negative terms they therefore used for themselves to describe this. Reflecting on this subsequently led me to change the category name to *stepping outside of expected behaviours*, which began to be more interpretive and revealing.

The function of category development is to systematically group multiple fragments of unconnected literal codes into something meaningful and more analytical and digestible; some interpretation may occur at this stage, but most of your interpretive work should be reserved for theme development. The process of constant comparison should mean that the themes developed from categories describe all the features and characteristics of each topic in the data as fully as possible and are conceptually as complete as the data allow.

In summary, constant comparison:

- stops you from being overwhelmed by your data
- provides a systematic way of working through the data
- keeps analysis grounded in the data
- helps you to develop categories that are as complete as possible
- shapes distinct categories that can be clearly operationalised.

### Getting themes from categories

Once you are happy with your categories, it is time to develop them into themes, the third step in moving from open or in vivo coding, through category development, to thematic coding. A dominant category may be used as a theme, in which case it is likely to remain quite literal. But often, themes are abstract concepts shaped from two or several more literal categories.

Tetyana Shippee (2009) described how she moved from literal/descriptive coding to a more abstract/interpretive understanding, and from open codes through categories to themes, when she analysed interview data from residents of a retirement village in America. Residents entered the village being able to live independently (IL) in accommodation on the complex. When they required moderate supervision and care, they were moved to assisted living (AL) spaces or, if they required more specialised care, into nursing living spaces (NL). According to Shippee, residents perceived transitions between types of living space as disempowering and final. One of the themes that helped her to arrive at this conclusion was *autonomy* (or lack thereof). Her development of this theme is shown in Figure 21.3. As you can see, she took initial open codes such as *lack of privacy* (an in vivo code taken from one interview) and *not allowed to go to the toilet by myself* (which was paraphrased from similar talk occurring across several interviews), and grouped these under the broader category of *threats to privacy and personal space* which keeps much of the sense of the open codes and so remains largely literal. She then grouped this category with others, such as *being told to move* and *rules regarding transitions*, to develop her final more conceptual theme of *autonomy*.

Shippee used her findings to suggest that retirement facilities should increase residents' privacy, challenge social boundaries that restricted social mixing between care levels, and educate residents to prepare them for transitions in care.

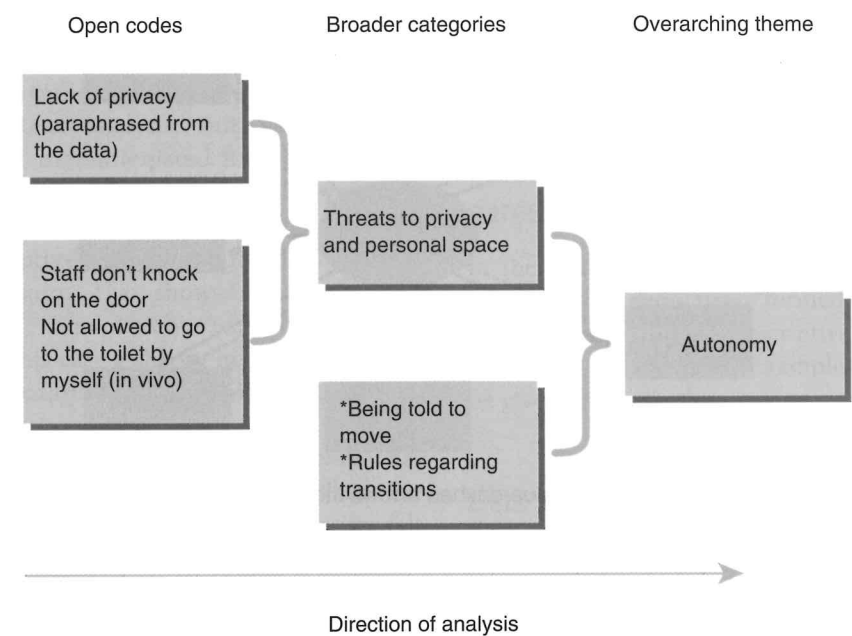


FIGURE 21.3 Code, category and theme development using data from the residents of a retirement village (adapted from Shippee, 2009)

\*Shippee does not show how she developed these categories from open codes

### Concept maps

To see whether your themes provide good explanations of the data and also to check whether there are any gaps in the data, you may find it helpful to put together a **concept map** (concepts are abstract ideas – themes may be abstract or literal but they can still be developed using a concept map). Although these may look similar to spider diagrams, their development proceeds in a somewhat different manner.

The way I use concept maps is to choose a theme that seems significant in some way (e.g. it accounts for a great deal of the data) and that I therefore wish to focus on. I put the label for this theme at the centre of my concept map. Then I consider its qualities and features according to the questions shown in Figure 21.4, using the data I have analysed. These are written up as brief notes within the concept map. Figure 21.5

shows the application of this system to my own data on abused women, involving a concept map for the theme of *hiding the abuse from others*.

When I ask students to develop a concept map of what it is like to be a student, as a classroom exercise, some interpret the 'who' to mean themselves and some to mean the whole population of students. Each interpretation might be valid; the questions in the template should be interpreted in ways that suit your data, your approach and your research question. Keep your concept map simple. This is not brainstorming, but a way of creating meaning from the pieces of your data puzzle. It is always important to consider the negative instances (data that seems to be contradictory but that need to be accounted for in the analysis). These are represented by blue dashed arrows in Figure 21.4.

Concept maps may be used singly or integrated with other concept maps to help you to

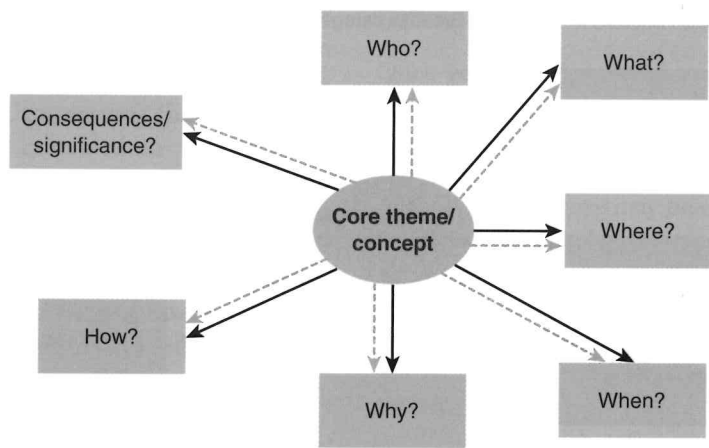


FIGURE 21.4 A concept map template (blue dashed arrows indicate negative instances – Why not? etc.)

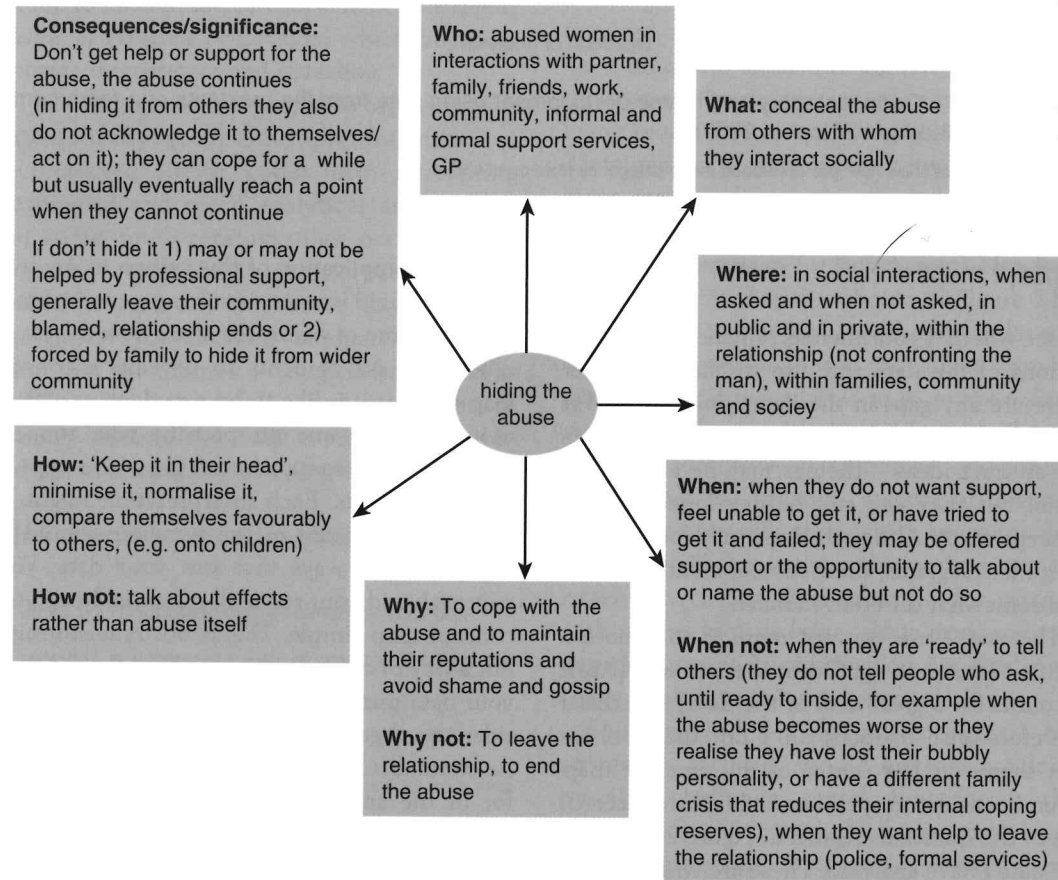


FIGURE 21.5 Concept map to consider the theme of abused women hiding the abuse from others

write up your data as well as in developing your ideas and checking whether more data need to be gathered. They are useful for thematic content analysis, but not essential. However, if the anticipated final product is a 'grounded theory' (see Chapter 22), you may find them indispensable. Figure 21.5 was used for a descriptive report using thematic content analysis. Figure 21.6 shows a concept map based on the same data but using it to develop theory, in this case a theory involving the concept of *boundary setting* to explain responses to abusive relationships

Commercial concept mapping software has been developed and also physical toolkits. For example, Ketso ([www.ketso.com](http://www.ketso.com)) comprises felt mats and Velcroed leaf shapes to represent ideas or codes, as well as other comment, prioritisation and linking symbols, all of which may be placed and moved around on the mats as your ideas take shape and reform. Generalist qualitative data

analysis software also includes modelling tools that serve a similar function.

## Presenting your findings – lists, careers and typologies

In thematic content analysis, themes (whether inductively or deductively formed) are typically written up either as descriptive lists, or as careers or as typologies. Examples of each will be given in this section.

### Lists

Rachel Millsted and Hannah Frith's (2003) report of their in-depth interviews with eight large-breasted women provides an example of a list format. Their interest was in exploring the ways in which the women make sense of and

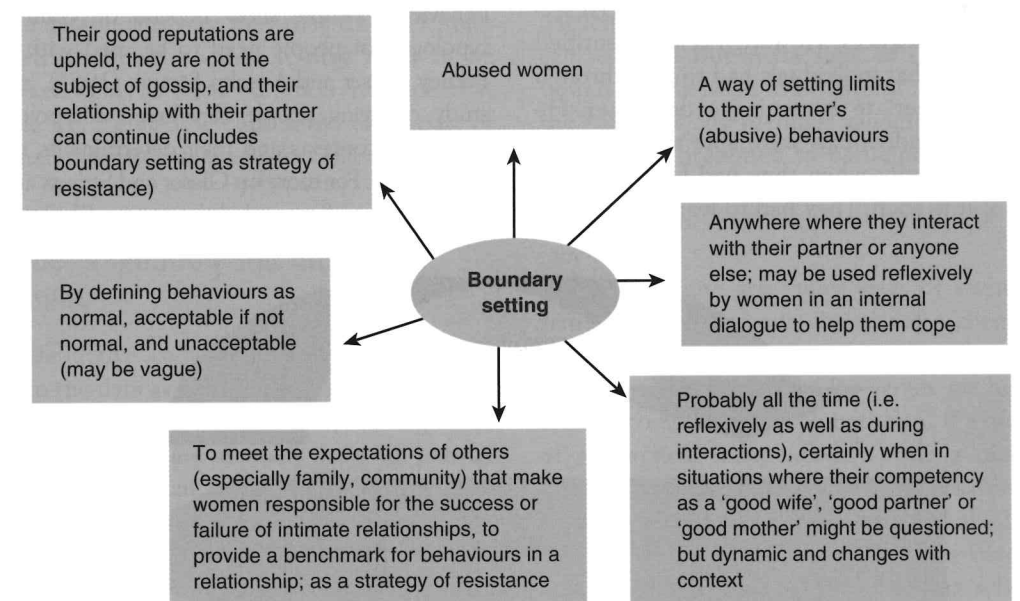


FIGURE 21.6 Concept map to explore the way abused women set boundaries to their abusive partner's behaviours

experience their embodied selves. They focused on two themes which they described in turn. The theme of breasts as *objectified and visible* was supported by data extracts such as the following:

Yeah, I do tend not to wear low-cut tops because even though they are still there when you wear a normal – not even high-necked – top, if things are on show then people do look more. (Nicola)

The theme of breasts as a *pleasurable marker of femininity and attractiveness* was supported by such data extracts as:

I think it's important 'cos it [having large breasts] does make you feel more feminine and I think with me being on the skinny side it does give me a little extra shape. (Joanne)

## Careers

Careers (or 'trajectories') are sequential, showing the progress people make through social settings or experiences. Howard Becker identified three stages that individuals had to pass through in their 'career' to becoming a drug user. He argued that individuals were able to use a drug for pleasure only when they had learnt to conceive of it as such. They had to learn the correct

technique for using the drug, learn to perceive the drug's effects and learn to enjoy these (Becker, 1963: 30, 51).

In another use of the career device, Mary Larkin (2009) considered the experience of people who had looked after dependent older adults until death of the dependant. She reported a post-caring trajectory with three experientially distinct phases:

- the post-caring void
- closing down the caring time
- constructing life post-caring.

Seventy per cent of her sample had cared more than once; she called these *serial carers*. Her analysis is summarised in Figure 21.7. Each stage in Larkin's and Becker's models accounts for a single theme of their analysis.

## Typologies

Typologies highlight differences between events, behaviours or people (but remember that the behaviours people show depend on context, so typologies of people need to be used with care). Barney Glaser and Anselm Strauss (1964), in their study of dying people, developed a typology of awareness contexts and their determinants, shown in Box 21.6. For more on Glaser and Strauss and the development of grounded theory, see Chapter 22.

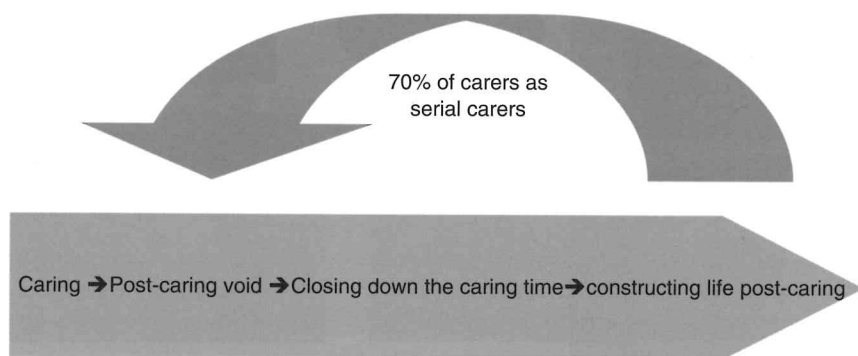


FIGURE 21.7 A model of the post-caring trajectory for carers of dependent older adults (adapted from Larkin, 2009)

## AWARENESS CONTEXTS: A TYPOLOGY AND ITS DETERMINANTS

### Typology

- |                       |  |
|-----------------------|--|
| 1 Open awareness      | Everyone knows the person is dying                                   |
| 2 Closed awareness    | The dying person does not know, but other people do                  |
| 3 Suspicion awareness | The dying person suspects  |
| 4 Pretence awareness  | Everyone, including the dying person, pretends that they do not know |

### Determinants of closed awareness

- Patients are inexperienced at recognising signs of impending death.
- Medical staff are skilled at hiding the truth.
- Staff have a professional rationale that says that it is best to withhold the truth.
- The patient has no family allies.

The examples in this section show how qualitative analyses make sense of the data in ways that can be shared with others. When analysts write up the data in this way, they may discover holes in their argument so that it may need to be reworked. This is such common practice that writing up can also be considered to be part of the analytical process (see also Chapter 28).

## Member validation and inter-rater reliability

Even deductive codes are shaped by what we bring to the data as individuals. As Ian Dey notes, 'there is no single set of [themes] waiting to be discovered. There are as many ways of "seeing" the data as one can invent' (1993: 110–111). This is one argument for *not* undertaking **member validation**, which means giving your research participants the opportunity to examine and comment on themes before your final write-up. It is appropriate to do this when a goal of your research is to identify and apply themes that are

recognised or used by your participants and their peers. This can be very useful as a check that one has picked up everything that is important to participants and described it in a way that they can relate to. But in the light of Dey's observation, it may be wise to be careful in interpreting the results of any member validation exercise if the analysis presented to participants is framed by complex theory, as research participants are not always the best people to judge the 'accuracy' of this.

Because there are many ways of seeing the same data, many qualitative researchers also argue against using **inter-rater reliability** tests to see if more than one coder agrees on how to apply a coding scheme. Nonetheless, if a number of researchers independently code a piece of qualitative data, there is often remarkable concordance in what they find (Frost et al., 2010), and discussion of differences can be revealing and fruitful in devising better coding schemes. Inter-rater reliability exercises may be particularly helpful when researchers' own biases and preferences need to be discounted.



## The framework approach

The **framework approach** is increasingly used to manage qualitative data for thematic content analysis (it is not a method of analysis, as often stated). Applied research projects and projects that have been set up to inform policy often have short timescales, and framework may speed up analysis. It is a mainly deductive approach and often all the data are collected before analysis begins, so that the zigzag approach (see Figure 21.1) cannot be used. This may be seen as a disadvantage or as preventing the researcher from being biased by earlier interviews, depending on your viewpoint. One advantage is that the analysis can be more clearly matched to themes in quantitative analyses. Typically, analysts still look for unexpected themes grounded in the data, but only once the data have been grouped more deductively.

Figure 21.8 shows the stages involved in this approach. This follows the same basic steps as in more conventional thematic content analysis except that data are summarised in charts or matrices developed from a thematic framework, rather than being more simply grouped together under code and then category headings as more linear text. The charts then become the primary resource for analysis.

The charts are conventionally constructed using Microsoft Word tables or Excel spreadsheets (or can be handwritten), but bespoke software was released in 2009 (see [www.framework-natcen.co.uk](http://www.framework-natcen.co.uk)). Unlike other approaches to thematic content analysis, the data are summarised early on in the process.

In Figure 21.9 themes related to social support in my partner abuse interview-based study is shown. The themes form columns in the matrix, and cases (the people interviewed) are

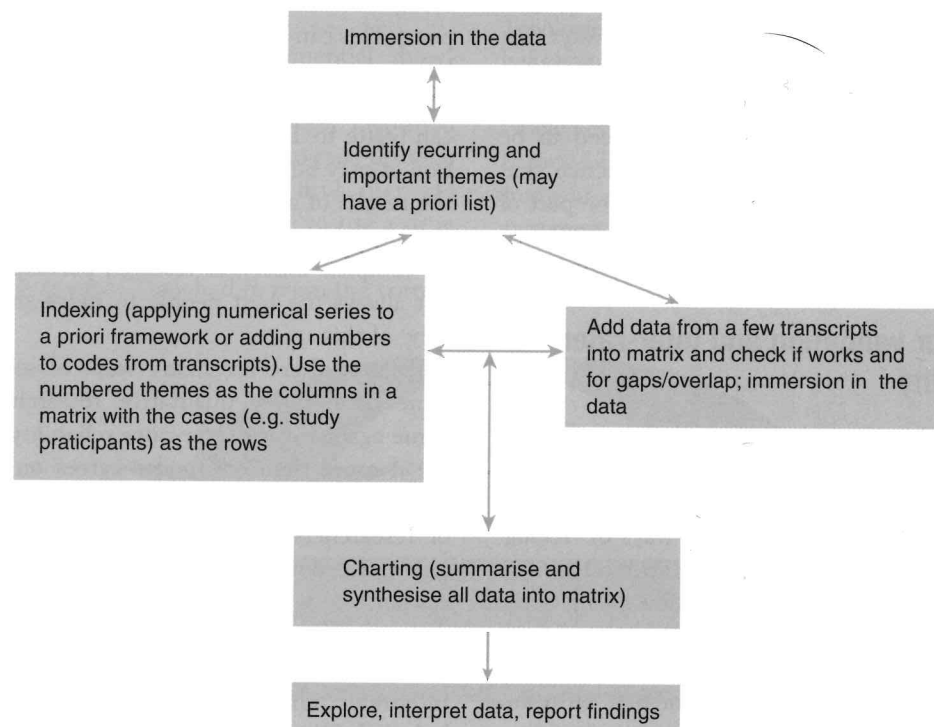


FIGURE 21.8 Stages in developing a framework

rows. Only two cases and three of the themes are shown in the figure here. Data are added to the cells as analysis proceeds. These can contain the researcher's own summaries of what each person said about the theme (in square brackets in Naomi's row) or edited quotes from respondents which are usually shortened by removing repetitive parts and extraneous words – in the figure the bits to be deleted are shaded in grey.

Comparisons are facilitated by this approach. A different chart is developed for each group of related themes, with the data summaries displayed as cases (the rows) and themes (the columns) such that comparisons can be made

across cases or across themes on the same chart. This makes it easy to develop typologies as well as careers. It also makes analysis more transparent and means the data can be easily accessed and even re-assessed by others. The same data may be used in different charts, but using cross-referencing rather than repetition.

## Computers as a way of managing qualitative data

Computer software may be used to build concept maps and framework charts, but the main uses

Theme 1: Social support			
Interview	1.1 Family	1.2 Friends	1.3 Community
#1 (Naomi)	... my mum and dad, I didn't really get to know them properly because ... I born here and they send me home when I was nine months, and then I grew up in Barbados with my grandparents. Naomi: 14	[Known close friends from childhood] ... my close friends they're like, since I was six, seven years old, my good girl friends, that girl that walked past, she's one of my close friends, I've known her for like 17 years ..., they wouldn't they wouldn't, put it this way, 'they wouldn't stop coming to visit me because they didn't like him [her abusive partner]. Tracy: 358	... you walk up the road and you meet someone you know. Everywhere you go, there's somebody that you know and if you haven't seen them for a long time, you'll stand and you'll have a chat and stuff like that, you know? It's really nice. I wouldn't ... I wouldn't like to move, from this town anyway, I wouldn't, because most of the people that I build up a relationship, they live around this town. And it's really good. You walk up the road, and you meet someone and you have a chat. Naomi: 172
#2 (Zoe)	My brother's just bought a house near around here, they're just round the corner from me, and my sister, who's my best friend, anyway and then she, when I go to work she sleeps in my house with the kids, so that they don't have to be in her house. Zoe: 75	A lot of my husband's friends, they're married to my friends. It's a common group. Zoë: 90	If I had none of my friends and family, I might not be able to work. I would like um, you know, to have a good nursery that could take them. Zoe: 76

FIGURE 21.9 A framework chart for an analysis of social support and abused women

made by qualitative researchers of software for qualitative data analysis (QDA software) are to support thematic coding and analysis, as well as to organise, summarise and integrate different types and forms of data, such as interviews, focus groups, documents and pictures. It is important to know that computer programs help researchers manage their data; they cannot do the analysis for them, although the most recent versions automate some coding processes. The latest versions allow users to import, sort and analyse audio files, videos, digital photos, Microsoft Word, PDF, rich text and plain text documents (previous versions did not allow all these formats). In addition, the programs have various tools that enable you to annotate your data, search for specific content within it, model your ideas, and compare different groupings of data using matrices. Figure 21.10 is a screenshot from *NVivo*; other popular programs include *MaxQDA* and *Atlas.ti*.

All of these programs use variations of what in *NVivo* are called coding stripes – these are codes

the researcher has applied to the data and are represented vertically so that the stripes match the corresponding parts of the transcript (in Figure 21.10, a video is shown on the left, with a transcript immediately to the right of the picture. To the right of the text are some vertical lines with words written above them; these are the coding stripes and the words are the code labels. Images, sound files and transcripts can be linked so that clicking on one takes you to the corresponding part of the other.

Metadata may be attached to the data files. These might be a feature of a participant (their gender or age, for example) or of a data transcript (e.g. whether a medical consultation led to a prescription). These metadata can be used to filter searches; for example, where an analyst who has interviewed men and women about their health experiences asks for the text coded as ‘pain talk’ to be provided separately for men and for women. Here, the gender of a respondent is metadata attached to each interview

transcript. The metadata can be treated like variables and in most programs they can be exported to spreadsheets or SPSS for numerical analysis in support of qualitative analysis.

Counts of code or theme frequencies and other numerical analyses may reassure the reader that the researcher has not simply cherry picked examples to support his or her particular bias. If phrases such as ‘most people felt’, ‘usually people

said’ or ‘it was rarely observed’ can be backed up by actual numbers, the reader should have more confidence in the report’s validity. Additionally, counts can be helpful in making comparisons between settings. David Silverman (1984), for example, found this in an observational study comparing medical consultations in private clinics with those in public health service clinics (Box 21.7).

## BOX 21.7

### PRIVATE AND PUBLIC HEALTH CARE

Out of 42 private consultations, subsequent appointments with the doctor were fixed at the patient’s convenience in 36 per cent of cases; in 60 per cent of cases the consultation involved polite small-talk about either the doctor’s or the patient’s personal or professional lives. The corresponding percentages in the 104 public health service clinics observed were significantly smaller (10 per cent and 30 per cent). This supported Silverman’s impression that a more personal service was given in private clinics.

Source: Silverman, 1984

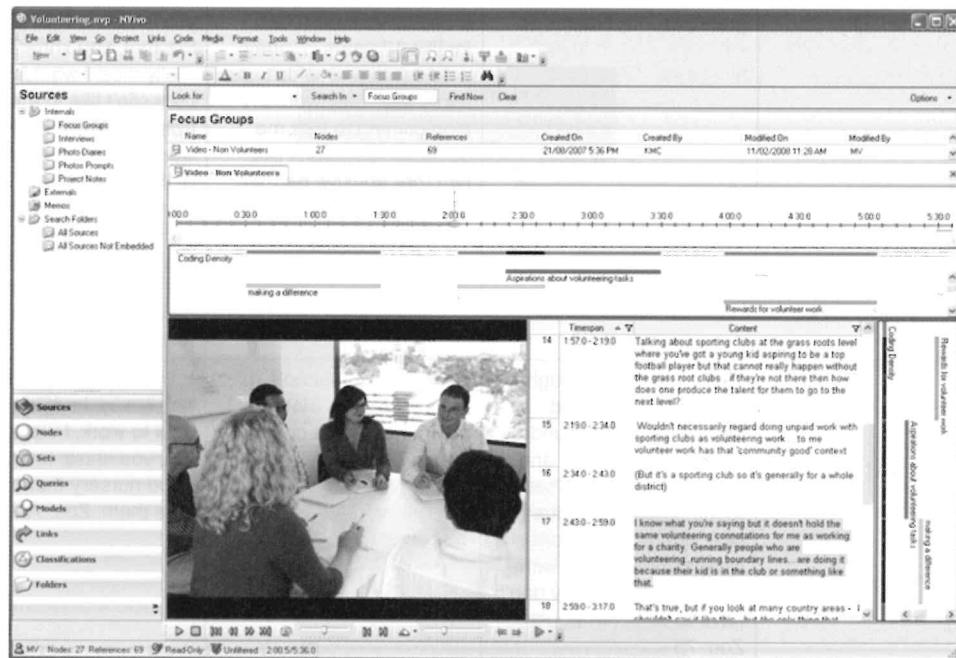
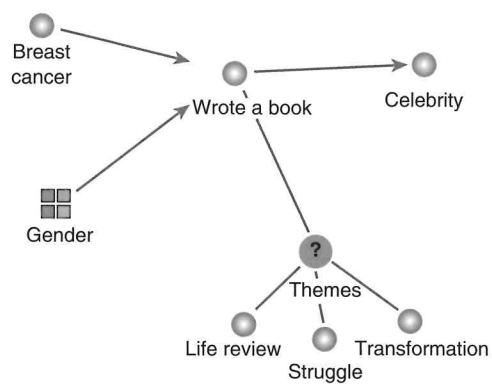


FIGURE 21.10 NVivo software

The programs also include search tools. A search of Rollnick et al.’s study described in Box 21.3, for example, might be used to retrieve all instances of the word antibiotics, embedded in surrounding text so that the context in which the word was used is not lost. Search functions might also be used to restrict analysis to particular transcripts, for example only those that resulted in a prescription, if this has been entered as metadata. In this way, analysis is not restricted to thematic codes but can be enriched by additional ways of mining the data, or the data may be used in multiple ways for different analyses. Word searches may also be used to double-check that you have not missed data and to clarify emergent ideas. Rollnick and colleagues (2001), using the search features of *NVivo* in their investigation of antibiotic prescribing, found that doctors were more likely to give advice on symptoms in consultations where antibiotics were not prescribed, suggesting that they

might have a ‘consolation prize’ function. Similarly, an attribute like gender might be used to compare whether male or female doctors talk about symptoms in different ways. Boolean searches enable different kinds of search to be combined as a single operation. For example, a search might be made for all paragraphs containing the word ‘antibiotics’ that occur in consultations before training happened, comparing these with such paragraphs in consultations after training. Chapter 6 contains detailed advice on how to do Boolean searches, in the context of literature reviewing, but similar principles apply in relation to their use in qualitative data analysis.

The programs also include matrices that compare coding frequencies, modelling tools, charts and other ways of representing the data that may aid analysis. Figure 21.11 shows a flowchart drawn with the modelling tool in *NVivo* during a project examining the representation of cancer experience in newspapers.



**FIGURE 21.11** Writing a book about cancer experiences: use of an early version of the NVivo modeller

Using this tool it became clear that women who had breast cancer wrote books about their experience more often than men with cancer or women with other kinds of cancer. These books frequently involved themes of life review, struggle and personal transformation. Many of the authors achieved celebrity status as a result. The software links models to the text used in their development so that clicking on the model takes you to the relevant data. The model can be used in this way as a thinking tool.

The programs also have memo tools. Some programs allow different team members to work on the same project, then merge their results, with each researcher's work still separately identifiable.

Searches (with or without the associated text), data aggregated in themes, screenshots, models, diagrams and charts can be printed out or exported to other programs. Reading these printouts is part of the analytical process. It helps you develop theoretical sensitivity to particular codes and categories and themes and refine and develop them.

As technology and demands change, bespoke software programs have become increasingly sophisticated and increasingly similar. However, each one has particular strengths:

- *Atlas.ti* specialises in hyperlinking, coding for grounded theory, and linking data flexibly so that it

can be rearranged until you are happy with what you have done, for example with uncoded text or spider diagrams.

- *NVivo* specialises in flexible coding and in bar and pie chart outputs.
- *MaxQDA* specialises in matrices, georeferencing (with direct links to Google Earth), text-based and mixed method approaches and keyword analysis (see Chapters 26 and 27).

Some programs have been developed for more specialist work; for example, popular dedicated video analysis programs are *Transana* and *Elan*. No single program does everything, and the program that is most suitable for you will depend partly on the purpose of your project and the type of analysis (e.g. grounded theory, framework), the type of data you are using, the unit of analysis (e.g. interview, image, video, participant) and the output you desire (e.g. linear text, models, matrices).

## Conclusion

This chapter has described how to code and analyse data for themes. It has shown that the basic process comprises three stages: open coding, category development, theme formation. With highly deductive coding, themes may be known in advance and therefore initial coding is used simply to apply the chosen theme and not as a preliminary stage in theme development. More inductive coding needs to pass through all three stages to provide credible, reliable, high-quality results. Analysis continues during write-up, whether the themes are developed inductively or deductively. This chapter has also shown that there is some flexibility in the way that thematic coding is undertaken – in terms of the types of words used to name codes and themes, the interplay of analysis and data gathering, the use of the literature and the bias towards induction or deduction. The data may be presented in a variety of ways, for example as descriptive lists,

careers or typologies, and they may be augmented by counts of the data. Various data management approaches, some of which involve

computer software, may be used to facilitate analysis by managing and displaying the data in useful ways.

## FURTHER READING

Coffey and Atkinson (1996) explain and illustrate a variety of approaches to qualitative data analysis, including those based on the sort of coding explained in the chapter, as well as some others. Gibbs (2002) is an excellent text which, although linked to the use of a particular computer package (*NVivo*), gives a good general guide to qualitative data analysis.

### Student Reader (Seale, 2004b): relevant readings

- 44 Anselm L. Strauss and Juliet Corbin: 'Open coding'
  - 45 Graham R. Gibbs: 'Searching for text'
  - 46 Udo Kelle: 'Theory building in qualitative research and computer programs for the management of textual data'
- See also Chapter 31, 'Computer assisted qualitative data analysis' by Udo Kelle in Seale et al. (2004).

### Journal articles illustrating or discussing the methods described in this chapter

- Bringer, J.D., Johnston, L.H. and Brackenridge, C.H. (2006) 'Using computer-assisted qualitative data analysis software to develop a grounded theory project', *Field Methods*, 18: 245–266.
- DeCuir-Gunby, J.T., Marshall, P.L. and McCulloch, A.W. (2010) 'Developing and using a codebook for the analysis of interview data: an example from a professional development research project', *Field Methods*. Published online before print 27 December, doi: 10.1177/1525822X10388468.
- Hsieh, H-F. and Shannon, S.E. (2005) 'Three approaches to qualitative content analysis', *Qualitative Health Research*, 15: 1277–1288.
- Seale, C. (2001) 'Sporting cancer: struggle language in news reports of people with cancer', *Sociology of Health & Illness*, 23 (3): 308–329.

### Web links

- e-Source – Chapter 10 on 'Software and qualitative analysis' by Eben Weitzman: [www.esourceresearch.org](http://www.esourceresearch.org)
- What is Qualitative Data Analysis?: [http://onlineqda.hud.ac.uk/Intro\\_QDA/what\\_is\\_qda.php](http://onlineqda.hud.ac.uk/Intro_QDA/what_is_qda.php)
- The CAQDAS (Computer-assisted qualitative data analysis) project: <http://caqdas.soc.surrey.ac.uk/>
- Qualis Research home page (makers of *The Ethnograph*, a tool for qualitative data analysis) – click on 'QDA paper' to download an excellent overview of qualitative thematic analysis: [www.qualisresearch.com](http://www.qualisresearch.com)
- Atlasti* website: [www.atlasti.com](http://www.atlasti.com)
- QSR home page – more information about *NVivo* can be found here: [www.qsrinternational.com](http://www.qsrinternational.com)

## KEY CONCEPTS FOR REVIEW

**Advice:** Use these, along with the review questions in the next section, to test your knowledge of the contents of this chapter. Try to define each of the key concepts listed here; if you have understood this chapter you should be able to do this. Check your definitions against the definition in the glossary at the end of the book.

Boolean searches	Memos
Careers	Metadata
Coding stripes	Open coding
Concept map	Operationalising
Constant comparison	QDA software
Deductive coding	Saturation of themes
Framework approach to analysis	Search tools
Immersion	Spider diagrams
In vivo codes	Thematic content analysis
Inductive coding	Theoretical sensitivity
Inter-rater reliability	Typologies
List format	Zigzag approach
Member validation	

### Review questions

- 1 Describe the difference between inductive and deductive coding.
- 2 What is the zigzag approach and how does it differ from framework analysis?
- 3 Define open coding and in vivo coding.
- 4 How can (a) spider diagrams and (b) concept maps help in analysing qualitative data?
- 5 What relationship do categories have to codes and to themes?
- 6 Describe the characteristics of a list format, a career and a typology.
- 7 What are the arguments for and against member validation and inter-rater reliability exercises?
- 8 What are coding stripes, metadata and Boolean searches?

### Workshop and discussion exercises

- 1 Examine either the transcript of a taped interview in Box 12.12 or the transcript in Box 21.8, taken from a study by Jocelyn Cornwell (1984), then do the following:
  - (a) Consider what themes you can find in this extract and use these to make a list of codes for the passage. Mark your transcript with code words that describe the themes on the margin.
  - (b) Consider what assumptions you have made. What have you found difficult?

- (c) Are your codes objective? What decisions have you taken in choosing particular codes to characterise particular words or phrases in particular ways? How do you account for similarities and differences in coding between other people in your group who have coded the extract? What has been left out? Can the use of such codes give us agreed interpretations of these data? If codes are not agreed, does this matter?
- (d) Report back to the rest of the workshop. Can interviews of this sort be used as a basis for generalising about the beliefs, practices and feelings of women?
- (e) If you are using a computer package for analysing qualitative data, such as *NVivo*, you may find it helpful to enter the data and your codes and use the computer to search for coded segments, or segments where codes overlap.

### BOX 21.8

#### INTERVIEW TRANSCRIPT: JOCELYN AND WENDY

- 1 *Jocelyn:* Last time we met, you told me that between the times  
2 that we'd seen each other, you'd been in hospital, and  
3 had had an operation.  
4 *Wendy:* That's right, I had er the hysterectomy done last year.  
5 *Jocelyn:* Can you tell me about that, about, take me back to the  
6 beginning with what happened. Were you unwell, what  
7 happened?  
8 *Wendy:* It was mainly cos I'd been on the pill for twelve years,  
9 and because of my age and the fact I smoked. I was  
10 reaching what they classed as erm a risk barrier, at risk  
11 age, and they wanted me to come off the pill. I'd been  
12 using the pill mainly to regulate my periods all that time.  
13 So I knew that if I come off, I'd be having a lot of  
14 problems, and basically the doctor suggested other forms  
15 of contraceptive, but it wouldn't have helped me as far as  
16 the bleeding was concerned.  
17 *Jocelyn:* What was the bleeding about?  
18 *Wendy:* My periods had never regulated from the time I'd started,  
19 so I used to bleed heavily, and maybe lose for ten, fifteen  
20 days at a time. The only thing that really regulated it was,  
21 was the pill. But it was getting to a stage that that wasn't  
22 easing it off any more.  
23 *Jocelyn:* Right.  
24 *Wendy:* It was unusual. I used to bleed for just five days while I  
25 was on the pill. I used to know exactly when my periods  
26 would start. It used to be sort of like 3.30 on a Wednesday  
27 afternoon, and then it started to change. I was starting to

(Continued)

(Continued)

28 lose maybe on the Tuesday, heavier and for longer. And  
29 I found that strange considering all them years it had  
30 stayed the same.  
31 *Jocelyn:* Did you talk to anyone about it before you went to see  
32 the doctor?  
33 *Wendy:* No, no.  
34 *Jocelyn:* No one at all?  
35 *Wendy:* No, I was just worried myself that there might be  
36 something wrong.  
37 *Jocelyn:* Did you ever talk about anything of that kind with either  
38 Sandra or with your mother?  
39 *Wendy:* No.  
40 *Jocelyn:* No, or with friends?  
41 *Wendy:* No, no. I would, I would tell them after I'd already sorted  
42 it out myself. But I would just automatically follow through  
43 on something myself. Go to my own doctor, or the family  
44 planning clinic.  
45 *Jocelyn:* And did they talk to you about that sort of thing or not?  
46 *Wendy:* No, no, it was never discussed. When I was younger nothing  
47 like that was ever discussed. Something that you just  
48 well I've always dealt with it on my own, I suppose I could  
49 talk to my mum about it, I just never did. Something I never  
50 spoke to her about.  
51 *Jocelyn:* So you went to see the doctor, and she said, she sent you  
52 to the hospital.  
53 *Wendy:* She suggested, well she said it was my body, and it was my  
54 choice. Cos, they said I could go on for quite a few years like  
55 it. But they did want me off the pill, and that I wasn't willing  
56 to do, just come off the pill and take a chance on what  
57 would happen.  
58 *Jocelyn:* Who was it who first mentioned having a hysterectomy then,  
59 you or them?  
60 *Wendy:* Me.  
61 *Jocelyn:* You?  
62 *Wendy:* Yes, on the, erm the second occasion when I went to the  
63 hospital, that was my suggestion. He asked me what I  
64 wanted done and I said I wanted the lot taken away, and  
65 he said fine. The first doctor didn't want to know, he  
66 said I wasn't old enough. There was nothing they could do.

67 *Jocelyn:* How old, how old were you?  
68 *Wendy:* About 33, 32 or 33. And then they wasn't willing to do it.  
69 *Jocelyn:* What made you think of that as an option? Were you, you  
70 were given other options, were you given the option of  
71 being sterilized, or anything like that?  
72 *Wendy:* No, sterilization wouldn't have made any difference to the  
73 bleeding.  
74 *Jocelyn:* Right.  
75 *Wendy:* That's just a form of contraception. As far as the bleeding's  
76 concerned, it's a matter of trial and testing different drugs.  
77 And I know other women that have maybe done that for  
78 four years. Tried drugs, don't work. Tried a different one,  
79 it doesn't work, try another one, it doesn't work. And they  
80 still end up having the hysterectomy done anyway. I don't  
81 see why I should go through all that hassle for two, three,  
82 four years, just for the same end result anyway. Makes you  
83 feel rather like a guinea pig, just testing out the drugs for  
84 them to see if they work. It's annoying, most of the  
85 gynaecologists are men anyway, so they don't know what  
86 you're going through. It's fine for a doctor to sit there and  
87 say you can go on for another ten years. He doesn't have  
88 that problem every month.  
89 *Jocelyn:* You see I think that um a great many people would find it  
90 shocking that you chose that as an option.  
91 *Wendy:* Well. No not really. I've got my children. If you want to  
92 look at it that way, that's what the womb is for. The  
93 womb is for reproduction, I've done my bit. I've got my  
94 two, I didn't want any more, so it was fine for me to have  
95 it taken away.  
96 *Jocelyn:* Did you have any idea, have you ever had any idea  
97 about why you have always bled so much, why, why your  
98 periods haven't ever been regulated?  
99 *Wendy:* No, I'd never, from the time mine started when I was at  
100 school, I never knew when I would start, I never knew  
101 how heavy I would lose. I used to be at home maybe for  
102 three or four days in bed. I was that ill. And the only time I  
103 wasn't was when I was on the pill. The doctor at the family  
104 planning said like they will regulate. I said I'm thirty, if they  
105 haven't regulated in fifteen years I said I don't think they're

(Continued)

(Continued)

- 106 going to now. But she just didn't want me to have it no  
107 more 'cos I smoked. That was it. She wanted me to stop  
108 smoking and I wouldn't. So I got my pills from my doctor  
109 instead! Just changed.
- 110 *Jocelyn:* Did she give you any explanation for why you needed to  
111 stop smoking that was connected to whether or not she  
112 would prescribe the pill?
- 113 *Wendy:* Because as you get older your blood thickens, you're more  
114 thickens the blood. And taking the pill also does the same,  
115 so for me I had three factors.
- 116 *Jocelyn:* Getting older, taking the pill, smoking.
- 117 *Wendy:* Getting older taking the pill, smoking. I can't stop getting  
118 older. I wanted to stay on the pill, but I could give up  
119 smoking, you know what I mean, so that was it, you cut  
120 out the smoking and you can keep the pill.
- 121 *Jocelyn:* And what's the consequence of this been? You had the  
122 operation a year ago?
- 123 *Wendy:* Yes, I had it done last year. And I felt fine, never had no  
124 problems. Obviously same problems as anyone has after  
125 an operation, but nothing drastic.
- 126 *Jocelyn:* Um, has it made any difference to your sense of yourself?
- 127 *Wendy:* Err, no. I mean some, some women sort of say they feel  
128 less of a woman for it, I don't. Not at all. I'm same as I  
129 was before. Just can't have children. That's it. I feel better  
130 in myself healthwise, because I don't have them problems  
131 every month that I had before.

Source: Cornwell, 1984; © The Open University (reproduced with permission)

## 22

# GENERATING GROUNDED THEORY

Clive Seale

### Chapter Contents

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Establishing good links between concepts, ideas or theories and the things that they refer to is an important aspect of the quality of research reports. In Chapter 30, it is pointed out that this concern to ensure good **concept-indicator links** is one that is shared by both qualitative and quantitative researchers. Grounded theorising is a set of techniques which emphasise the

creation of theoretical statements from the inspection of data, largely gathered in qualitative observational studies of the sort described in the chapter on ethnography (Chapter 14). The participant observer using a grounded theory approach cycles between episodes of data collection and data analysis, the one informing the other, so that the eventual