

# 10 An Introduction to Interview Data Analysis

In this chapter we will introduce you to some of the basic principles applicable to the analysis of qualitative interview data, and provide you with practical guidance on their use. As we noted in [Chapter 2](#), interviews are used within a wide range of methodological traditions and philosophical underpinnings in qualitative research; this naturally leads to some very different approaches to the analysis of interview data. Since this is not a specialist text on data analysis, we have had to be selective in what we have chosen to cover here. We have been guided by the techniques you are most likely to come across in the research literature based on qualitative interviewing, and that you are likely to find helpful for your own research.

When considering the many different forms of analysis available, one distinction that is often made is between approaches that are strongly focused on language and those that are more concerned with the content of what participants have to say. The former are generally located within the social constructionist tradition (Burr, 2015) and include varieties of discourse and narrative analysis. They seek to examine how language is used to achieve certain ends in social interaction, or to create a story that makes sense of aspects of the teller's life for a particular audience. The latter usually come from either contextualist or realist philosophical positions, and include phenomenological approaches (Langdridge, 2007), grounded theory and most qualitative or mixed method case studies (Hartley, 2004). They are principally concerned with understanding their participants' lived experience from their own position – to step inside their shoes, as it were. For more guidance in relation to discursive and narrative approaches, see the chapters that follow in this book. In this chapter we will focus on thematic approaches to analysis, which are normally associated with experienced-focused methodologies. In doing so, we will cover the following topics:

- transcription
- principles of thematic analysis
- a basic system of thematic analysis
- assessing the quality of qualitative analysis
- writing up a thematic analysis
- alternative styles of thematic analysis

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Thousand Oaks, CA: Sage.

## Transcription

Transcription is the process of converting recorded material into text, and as such is usually a necessary precursor to commencing the analysis of your interview data. Indeed, if you are doing your own transcribing it can be seen as the first step in the analysis itself, as it inevitably helps you to become closely familiar with your data (Langdridge, 2004). Before you begin transcribing there are key decisions you have to make that will have a major impact on what you produce from your analysis. Will you transcribe all your tapes in full? What system of transcription will you use? If you employ someone else to carry out transcription, what guidance or training do they need? In answering these questions you need to bear in mind the methodological position of your study, the resources you have available for the task, and the main potential threats to the quality of transcripts that you need to guard against.

## Full or partial transcription?

There are really two issues at stake here: whether you transcribe every second of every interview word for word (verbatim), and to what level of detail you need to transcribe. While it might seem self-evident that verbatim transcripts are the preferred option, you must consider how very time-consuming transcription is. Even at the simplest level – where only the actual words spoken are recorded – you can expect the transcription of an hour’s interview to take between 4 and 8 hours, depending on the quality of the recording and your typing skills. For studies involving a relatively large number of interviews – say 20 or more – full verbatim transcription is thus a huge investment of time and effort (and, if you are paying someone else to do it, money). Those methodologies that are focused strongly on how language is used generally require a much more detailed level of transcription, with notation used to indicate length of pauses, overlapping speakers, voice intonation and so on. In approaches such as discourse analysis and conversation analysis, transcribing one minute of interaction can take many hours. While these approaches generally prefer to work with natural conversation rather than interview data, narrative techniques – which commonly *do* use interviews – may well need to include at least some of the more detailed information that helps to convey meaning in the spoken word. We look at discourse analysis and narrative approaches to interviews later in [Chapters 12](#) and [13](#).

To avoid becoming swamped by the transcription process, the golden rule is to think carefully about what needs to be transcribed, at what level of detail, from the very start of planning your research project. For some methodologies, you may be concerned to identify broad patterns of common themes across quite a large number of participants – for instance, in an organisational **case study** or in an evaluation study. In these kinds of instances, recording everything verbatim may not be necessary; you might decide to listen through the tapes to identify main areas of interest and then only transcribe those sections in full, summarising the rest. Alternatively, you may on some meaningful grounds identify certain respondents as key informants for your study and just transcribe their interviews in full, summarising the rest. In contrast, approaches that seek to examine personal experience in depth (e.g. narrative and phenomenological) will require full verbatim transcription, probably involving a level of detail beyond the basic. Economising on resources by summarising or transcribing more superficially is not a sensible option here; instead you need to factor in a substantial amount of time for transcription when deciding how many interviews to carry out.

## Systems of transcription

It is crucial that you adopt a consistent style for your transcription, so that it is clear to you and to anyone else reading your material what features of speech your notations indicate. Numerous authors have offered transcription systems, especially for discourse- and conversation-analytic approaches. The best known of these is Jefferson’s (1984) highly complex system, and Silverman’s (1993) more concise version of it is also widely cited. Such systems seek to capture every aspect of speech that might indicate something about the way verbal interaction operates and what it achieves. Pauses are timed to the tenth of a second, changing intonations within individual words are recorded and so on. There is less standardisation among the simpler forms of transcription, although certain conventions are commonly seen, such as the use of capitals to indicate emphasis. Poland (2002) provides some useful suggestions for transcription notation, and we present a relatively simple system based on this and other sources in [Table 10.1](#). Ensuring that you have line-numbered your transcript (an important consideration when undertaking transcription) is usually a very simple task when using word-processing programs.

**Table 10.1** A basic transcription system

<b>Interview feature</b>	<b>Representation</b>	<b>Notes</b>
Emphasis	Capital letters Ptp: I NEVER thought that!	
Pauses	Very short pauses, use: (p) Longer pauses, use: (pause) Ptp: I (p) I had been there a few times, but (pause) had never had that (p) kind of problem before.	We would suggest under half a second is a 'very short' pause. You might want to note particularly long pauses – perhaps those over 2 seconds – either with the notation: (long pause) or by actually timing the pause: (three sec pause)
Interruptions	Place a dash at the point of interruption. Ptp: She said she'd meet me – Int: Sorry, who said that?	
Overlapping speech	Use a dash as for interruption, but precede the overlapping comment(s) with: (overlap). Where the overlapping section ends, note with: (end overlap). Ptp: The dog wouldn't stop bark– Int: (overlap) Was the dog in the room with you then? Ptp: (overlap) –ing, yes, she was. Yes. (end of overlap) I did feel safer with her there, even though she wouldn't hurt a fly.	You may sometimes be unsure whether to count an exchange as an interruption or an overlap. We would suggest you only use the latter where there are more than a few syllables of simultaneous speech by both parties.
Audibility problems	If a word or phrase is completely inaudible, use square brackets to indicate this: Ptp: I examined his [inaudible] but it seemed quite normal If the word or phrase is unclear but you have some idea what may have been said, put the speculative transcription in square brackets, followed by a question mark. Ptp: I examined his [ankle movement?] but it seemed quite normal	
Laughing, coughing and similar features	Note the feature in parentheses. If both parties are (for instance) laughing at the same time, make this clear. Ptp: I couldn't believe what I was seeing! (both laugh)	
Tone of voice	Where the participant's (or indeed interviewer's) tone of voice clearly indicates how a section of speech is	It is particularly important to note tone of voice where without doing so the meaning would be very

intended to be understood, mark this in parentheses.

Ptp: I mean (ironic tone) we REALLY need bright sparks like that in this company!

Ptp: After that (frustrated/angry tone) I was a bit narked with her, I have to say.

likely to be misinterpreted. Thus in the examples to the left, you could get away without noting the tone in the second case, as the feeling of frustration is evident in the words spoken. However, in the first case without the annotation there is a danger that the comment could be read as praise rather than the opposite.

Direct speech	If the participant is directly quoting another person or themselves, put this section in speech marks. Note in parentheses if this is accompanied by a clear mimicking of another's voice, or a distinctive change in tone to their own voice.  Ptp: I said (angry tone) 'where are you going with that?', and he just sort of stammered and said (mimics) 'er, I just needed to, er, check it out'.
Non-verbal communication	Where you have recorded distinctive non-verbal communication that strongly reinforces meaning, this can be noted in parentheses.  Ptp: It was a HUGE cock-up, just huge (stretches arms wide to indicate size)

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Based in part on Poland (2002).

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## Threats to the quality of transcription

In recent years the discussion of quality issues in qualitative research has become prominent in the literature (e.g. Seale, 1999a; Lincoln, 2004; Golafshani, 2003; Johnson et al., 2006; Yardley, 2008; Tracy, 2010; Morse, 2015). However, relatively little attention has been paid to transcription quality in relation to qualitative research (although it does exist in relation to more language-focused fields) – this is perhaps surprising, as inaccurate transcripts will inevitably have a deleterious impact on the process of data analysis. Poland's (2002) careful consideration of this topic remains a notable exception to the rule. Although not an exhaustive list, we would suggest three main threats to the quality of transcription that you need to take steps to minimise: recording quality, missing context, and 'tidying up' transcribed talk.

### Recording quality

Good transcripts depend on good-quality recording equipment and its effective use, issues we have already discussed in some detail in [Chapter 5](#). In addition to these points, there are things you can do during the interview and afterwards to aid transcription. Ask your questions in a clear voice and at a measured pace – it is very easy to find yourself talking too fast if you are feeling at all nervous. While we would caution against drawing too much attention to the recording device, if your participant is especially unclear and/or rushed, it would be advisable to ask them to speak a little slower and more clearly. Similarly, if they say something that strikes you as particularly important but in a way that is

garbled or confused, you can ask them to repeat themselves just to make sure you have understood their point. It is a good idea to record an identifying statement at the start of the tape – giving the date and time of the interview, who the participant is and (if more than one involved in the study) who the interviewer is. Make sure you save and label MP3 files straight after the interview in a way that makes them easily identifiable (see Patton, 2015, for more discussion of these issues).

## Missing context

It is often essential to be aware of contextual features beyond the words spoken to accurately prepare a transcript for analysis. This includes both the immediate context of what is being said – non-verbal communication and paralinguistic aspects (voice intonation, volume, pitch and the use non-linguistic utterances such as laughter, sighs and pauses) – and the wider context of the interview itself. For example, consider the following exchange:

Interviewer: So how did you like the new job?

Participant: Oh it was great, just great.

Interviewer: Did anything in particular make you feel like that?

Participant: Everything!

Read as a simple verbatim transcript, this would reasonably be seen as indicating her very positive feelings about ‘the new job’. However, if you knew that the participant’s first comment was made with a falling intonation and emphasis on the two ‘greats’, accompanied by a facial grimace, while her second utterance was preceded by a bitter-sounding laugh, you would almost certainly come to the exact opposite conclusion regarding her feelings. This shows that even where basic verbatim transcription may seem sufficient in the light of a study’s aims and methodology, there are always likely to be occasions where a failure to record immediate contextual factors will seriously undermine transcript quality. The extract above, with some fairly simple additional notation, would be much more helpful to the analyst:

Interviewer: So how did you like the new job?

Participant: Oh it was GREAT, just GREAT (ironic tone on ‘great’, facial grimace).

Interviewer: Did anything in particular make you feel like that?

Participant: (bitter laugh) Everything!

Paralinguistic features will naturally be present in the recording and incorporating them is just a matter of being clear about when and how they should be included in the transcript. For many studies, it will be sufficient only to note them when they clearly impact on the meaning of what has been said. In contrast, non-verbal communication will not be recorded (except in the relatively rare event of the use of video); the only way to enable this to be incorporated is to take hand-written notes of any particularly expressive examples. This is one reason for trying to get transcripts prepared as soon as possible after the interview, as it makes it easier to match any such observations to the correct point in the interaction.

The wider context of the interview includes such things as the level of formality, the setting, and the social dynamics of the participants' lives, where these relate to the topic of the interview. For example, if you were interviewing adolescents about their sexuality, knowing that a parent was present might be pertinent to the sense you make of what they say. Similarly, your knowledge of aspects of an organisation's history might alert you to meanings in the talk that would not be apparent to a researcher unfamiliar with the background. The first author and colleagues (King et al., 2008b) came across a good example of this in a project looking at community nursing roles in palliative care (the care of terminally ill people). One group of nurses we interviewed were members of district nursing teams. We found that when we asked them about the role of a new type of nurse then recently introduced into practice – the community matron – many of them briefly laughed before speaking. Anyone unfamiliar with the setting might just have overlooked this. Because we had a good knowledge of the history and politics behind these professional roles and relationships (both locally and nationally) we felt confident that this repeated reaction was indicative of some degree of difficulty in relationships between the two groups of nurses. We therefore made sure these laughs were noted in transcripts.

This example illustrates the challenges posed by the wider context of interviews. There is undoubtedly a danger that the kind of prior knowledge we had as researchers could blinker our interpretation; we might make too much of contextual features noted in the transcript because of our expectations. However, if we ignored this knowledge, we might at best produce a shallower understanding than we could have and at worst missed important aspects of participants' experiences. There is no simple and universal solution to this dilemma. However, it can be useful to include comments on contextual features in a speculative manner, as shown below:

Interviewer: So what role have the community matrons been playing with these patients?

District Nurse: Hmm, well (laughs lightly) I'm not sure if I'm in the best position to comment on that. (NB tone perhaps defensive?)

This should alert you in your analysis to be cautious about your interpretation, and to seek other evidence to strengthen or reject it elsewhere in the transcript.

## **'Tidying up' transcribed talk**

Language in spoken form is almost always messier than it is in writing. It can be tempting when transcribing to 'tidy up' mispronunciations, mangled grammar, and so on, especially if the transcriber is used to working in a secretarial role where it might be expected that she or he should correct 'errors' of this kind. Researchers themselves may be tempted to do the same because they are concerned not to make the participant (or themselves!) appear inarticulate (Poland, 2002). However, it is not the purpose of transcription to produce a corrected version of what people have said but rather an accurate one. Employed transcribers should be given clear instructions to record what they hear and not to change even obvious 'errors' in talk. In particular, where they cannot work out what has been said it is important that they do not simply insert a best guess – rather they should mark the word or phrase as *inaudible* or *unclear*, in the latter cases perhaps including some comment in parentheses, as in the example below.

Interviewer: What are your relations like with the doctors in that practice?

Nurse participant: Well, it depends err depends on who you mean and err (laughs) you'd have to say (unclear – perhaps 'time of day?'). Doctor [name inaudible] is a real sweetie though!

Technical terms and jargon can create a particular problem for transcribers. In an interview with a family doctor carried out by the first author, the participant said of a patient that ‘her ESR was within normal limits’. The ESR (erythrocyte sedimentation rate) is a test used to help diagnose certain inflammatory diseases. The transcriber, evidently unfamiliar with this terminology, recorded the doctor as saying ‘her ears were within normal limits’. In this instance, the unlikelihood of the transcribed phrase alerted the research team to the need to return to the tape themselves, but sometimes mishearings may be less obvious. Where possible, you should provide employed transcribers with a glossary of technical/jargon terms that they might come across in the course of an interview.

When it comes to presenting quotes to support your analysis, in a paper, dissertation or report, we would accept that it is sometimes appropriate to carry out minor tidying up in order to aid comprehension. This should be done with great care, to minimise any distortion of meaning, and we would normally argue against making any changes to dialect – where this could be obscure to readers it is better to include an explanatory comment in brackets or as a footnote.

## Principles of thematic analysis

There are many different styles of **thematic analysis**, each with their own distinctive procedures. Before we look at examples of these, we will focus on some basic principles that apply to thematic approaches in general. First, though, we need to consider what is meant by the term **theme** itself. There is surprisingly little discussion in the methodological literature of what is meant by the concept; it is often used in a common-sense way to refer to patterns in the data that reveal something of interest regarding the research topic at hand. A useful discussion of what constitutes a theme can be found in Braun and Clarke’s (2006) paper on the use of thematic analysis in psychology. We would agree with them that while it is impossible to set hard-and-fast rules as to what should be identified as a ‘theme’, there are some guidelines that can be offered. First, identifying themes is never simply a matter of finding something lying within the data like a fossil in a rock. It always involves the researcher in making choices about what to include, what to discard, and how to interpret participants’ words. Secondly, the term ‘theme’ implies some degree of repetition – an issue raised just once (however powerfully) should not be called a theme, although it may still play a part in the analysis. Usually repetition means across two or more cases (interviews), but we would argue that it can sometimes be useful to identify themes unique to an individual case. Third, themes must be distinct from each other. Although some degree of overlap is unavoidable, if there is widespread blurring of boundaries between the themes you identify, they will be of little use in clarifying the interpretations you have made to those reading your work. With these points in mind, we suggest the following definition of a ‘theme’ in thematic analysis: themes are recurrent and distinctive features of participants’ accounts, characterising particular perceptions and/or experiences, which the researcher sees as relevant to the research question.

## Balancing within-case and cross-case analysis

Since qualitative research emphasises the importance of context, analysis must make sense of particular experiences against the backdrop of the particular participant’s full account (as presented in the interview transcript). Equally, thematic analysis is concerned with saying something about the group of participants as a whole. This means looking at patterns of themes across the data set as a whole, highlighting what interviewees have in common as well as how they differ. All techniques of thematic analysis therefore face the challenge of striking the right balance between *within-case* and



*cross-case* analysis. If the within-case aspect is neglected, your themes are in effect treated as variables in the positivist tradition – abstract notions detached from the particularities of personal experience. If cross-case analysis is not properly developed, you are likely to produce a disjointed collection of case studies that do not allow you to effectively address your research question. Naturally, studies will differ in whether their emphasis is towards the within-case or cross-case end of the spectrum. For example, a project looking in depth at five participants' experiences of moving home would want to devote a considerable amount of attention to individual cases. In contrast, a study in an organisation examining how a new IT system impacts on perceived job roles, involving 40 interviews, would strongly emphasise cross-case analysis.

## Organising themes

In all versions of thematic analysis, the researcher is required not only to produce a list of themes but also to organise those themes in a way that reflects how they are conceptualised to relate to each other. This is almost certain to include some degree of hierarchical relationship, in which main themes encompass sub-themes. Thus, in the hypothetical example above of a study into the experience of moving house, a main theme of anxiety might incorporate sub-themes such as *anxiety about the cost of moving*, *anxiety about new neighbours*, and *anxiety about children's responses to moving*. The number of levels of hierarchy used varies between approaches. Studies using Braun and Clarke's (2006) approach to thematic analysis typically have fewer (one or two) levels, while it is common to have some aspects of the data coded to four or five levels in **template analysis** (Brooks et al., 2015; King and Brooks, 2017b).

The organisation of themes can also include links between hierarchical groups or clusters. This method is often used where the researcher aims to develop a conceptual model of the phenomenon under investigation, as is the case in grounded theory (Corbin and Strauss, 2015). Sometimes, within a mainly hierarchical thematic structure, the researcher may want to indicate that certain themes permeate so much of the data that they cannot be restricted to any one hierarchical grouping. In a study of patients' adaptation to diabetic renal (kidney) disease, the first author and colleagues found that issues relating to *stoicism* (as a coping strategy) and *uncertainty* thread through many aspects of almost all the participants' accounts. We therefore defined these as 'integrative themes', cutting across the otherwise hierarchical thematic structure (King et al., 2002).

## Balancing clarity and inclusivity

Qualitative research is interested in providing analyses that are rich and deep; this argues for including as much of the relevant data in your themes as possible. At the same time, a major purpose of developing a thematic structure for your analysis is to help you explain your thinking about the data to other people. Themes therefore have to be well defined and distinct (as noted above) and the thematic structure clear and comprehensible. To some extent, these two goals can be conflicting. If you have a very large number of themes and a poorly organised or over-complex thematic structure, it will be hard for a reader to get an overview of your analysis and to understand how different aspects relate to each other. If you minimise the number of themes you include and over-simplify the structure in the name of clarity, you may fail to explore and interpret your data in sufficient depth to justify a qualitative approach. Again, just how you respond to this challenge will depend on the nature of your study and the kind of output you are producing. In a postgraduate thesis you may err on the side of inclusivity, as you will want to demonstrate the depth of your analysis, and you have the space to explain quite a complex thematic structure – although even here you should seek to present it as



clearly as possible. In a 4000-word journal article, perhaps addressed to a readership that is not necessarily expert in qualitative research, you may be advised to sacrifice some inclusivity to ensure clarity.

There are several ways in which you can present your thematic structure to your readers. The simplest is a list, with a numbering system (and successively wider indentation) to indicate levels of themes. This can also be shown in table form, with columns representing levels. Another style that is quite popular is a ‘tree’ diagram, with sub-themes branching off each main theme (e.g. Langdridge, 2004; Braun and Clarke, 2006). This is visually effective, though hard to use well if you have a large number of themes (and of levels), where the list/table form probably works best.

Where you are organising your themes to present a conceptual model with lateral as well as hierarchical relationships, a diagram similar to a ‘mind-map’ can be a very useful form of presentation. You may include explanatory comments on the lines or arrows linking themes to help explain your thinking. Note that you need to be particularly careful with this kind of diagram not to make it over-complicated. Bear in mind that you do not always have to present your entire thematic structure when you are reporting your findings. In postgraduate theses it is quite common where the writer has a large and/or complex thematic structure to present an abbreviated version in the main text and place the full one in an appendix. In other publications, similarly, you can present a short form so long as you explain what you are doing.

## Auditability

Part of the process of carrying out a thematic analysis is being able to demonstrate how you developed your themes and arrived at your final thematic structure. Such ‘auditability’ of analysis is proposed as an important quality criterion by several writers (see the discussion of quality issues below). It can also be extremely useful as you progress through analysis to be able to return to these earlier versions and look back at how and why your thinking has developed through the process. It means that you must keep a record of all the major stages of developing and organising your themes; for example, you should store successive versions of your thematic structure in numbered and dated files to enable you to remember the process. In a thesis or dissertation, you would normally include some discussion of how you developed your themes and their structure, usually within your ‘Methods’ section, and place key documents illustrating the process (your **audit trail**) in appendices. In other publications such as journal articles, you are unlikely to have the space to include much of this sort of material, but you should at least give a brief account of the main steps in the process.

## Thematic analysis: a basic system

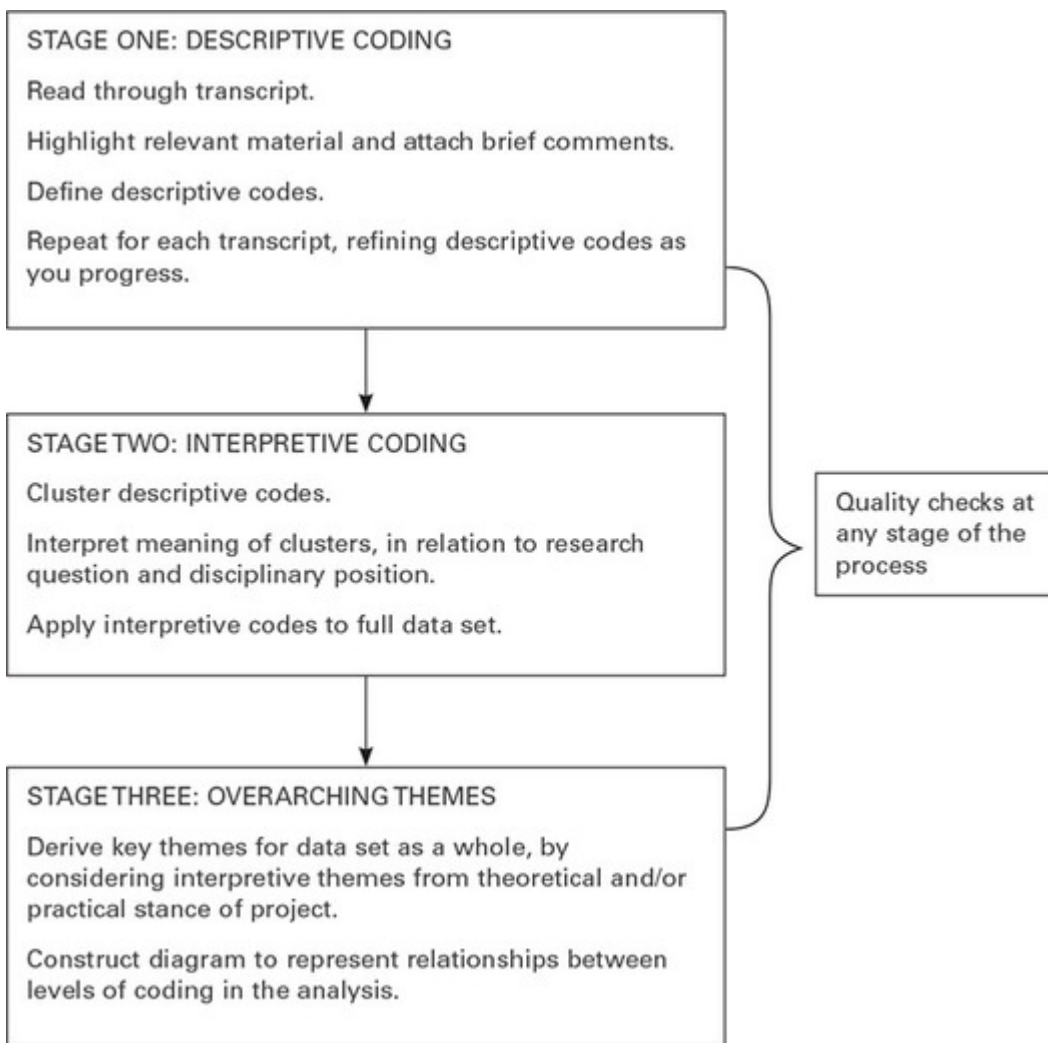
In this section we will present an example of a basic system of thematic analysis, incorporating the principles noted above. We draw particularly upon the guidelines offered by Langdridge (2004) but also on other sources, including Braun and Clarke (2006). As is pretty much universal, we break the process down into a series of stages (and steps within these), but would note that in reality carrying out an analysis does not progress in a purely sequential manner. There is often the need to cycle back and forth between stages; for instance, recognising the need to go back and rethink aspects of interpretive **coding** while engaged in defining overarching themes. [Figure 10.1](#) illustrates the steps we suggest in this kind of analysis.

## Descriptive coding

At this stage your goal is to identify those parts of your transcript data that are likely to be helpful in addressing your research question. The emphasis is on trying to describe what is of interest in your participants' accounts, rather than seeking to interpret its meaning. The first step is to read through the transcript you wish to analyse at least once without making any attempt to code it, to familiarise yourself with it as a whole. This is important because when you are analysing any particular section of the transcript you need to do so in the context of the interview as a whole. To make sense of what your participant says at one point will often require you to refer back to something they said earlier or forward to something they said later (or both).

The next step is to highlight anything in the transcript that might help you to understand the participant's views, experiences and perceptions as they relate to the topic under investigation, and to write a brief comment indicating what is of interest in the highlighted text. The mechanics of this are up to you – you might want to use coloured highlighter pens, or simply underline in pencil. You might write comments in the margins next to highlighted sections, or use some kind of numbering system and compile your comments on a separate sheet. If you are using a computer software package to help your analysis, such as NVivo or Atlas.ti, it will have its own system for carrying out these tasks (such software is commonly referred to by the acronym 'CAQDAS', which stands for Computer Assisted Qualitative Data Analysis Software). We suggest you experiment to find out which way of handling the data works best for you, though if carrying it out by hand we would always advise that you lay out your transcripts with wide margins on both sides (4–5 centimetres should do) and double spacing, and with line numbering inserted.

**Figure 10.1** Stages in the process of thematic analysis



The final step of this first stage is to use your preliminary comments to define descriptive codes. These should stay relatively close to the data, avoiding the temptation to speculate on what might lie behind what the participant has said or to interpret it in the light of psychological theory. There is no need to incorporate every bit of text you initially highlighted within a descriptive code: you may decide when you read through your initial comments that some are not actually relevant to your analysis (although we would urge you to err on the side of caution if in doubt about this). Label your descriptive codes with single words or short phrases (which can include abbreviations), ensuring that these are as self-explanatory as possible. You want to be able to see at a glance where each of your descriptive codes occurs on each page of transcript. In [Figure 10.2](#) we show an example of a section of interview transcript with highlighting, initial comments, and descriptive codes attached.

Note that one segment of text may have more than one descriptive code attached. For example, in [Figure 10.2](#) you can see that the descriptive codes *attempt to discuss* and *failure to discuss* relate to the same section of text (lines 5–7). Some overlap between codes is inevitable, because we are imposing distinctions as researchers on free-flowing accounts of complex experiences. If you find, though, that certain codes are coinciding almost every time they occur, it would suggest that it is not really useful to maintain them as separate and that they should be merged.

Once you have identified descriptive codes in a whole transcript, you should read through again and see if you can merge some together, where there is a high degree of overlap between them. Then

moving on to the next transcript, you read through, highlight and add comments as before. Where these comments can be encompassed by a descriptive code you have already defined in your first transcript, you can use that code – otherwise, define a new one. Again, at the end look through for overlapping codes and merge or redefine where necessary, and then repeat the whole process for the rest of your data set. As your thinking about your coding develops in the analysis of successive transcripts, you may well need to go back and modify some of the coding on earlier ones. This process of defining, applying and redefining codes could in principle carry on *ad infinitum*, so at some point you need to make a pragmatic decision to move on to the next stage. You can usually recognise the law of diminishing returns taking effect: if you are taking hours to make minor changes to coding you have probably reached a stage where the descriptive codes are ‘good enough’.

## Interpretive coding

At this stage, you try to define codes that go beyond describing relevant features of participants’ accounts and focus more on your interpretation of their meaning. In the main you do this by grouping together descriptive codes that seem to share some common meaning, and creating an interpretive code that captures it. However, in the process of looking at your descriptive codes, and referring back to the transcripts to help keep them in context, you may see where you could usefully define an interpretive code that is not directly related to particular descriptive codes. Note that going back to the data to clarify your thinking about coding is important to do at all stages of the analysis.

**Figure 10.2** Example of descriptive coding stage

Interview extract (with highlighting)	Comments	Descriptive codes
1 So I was kind of developing this relationship along the lines of,	<i>Might be running a business together</i>	<i>Future busn. plans</i>
2 that we would possibly be running a business together, but as		
3 the weeks and months went by, um, the business was actually	<i>Time went by without communication re business</i>	<i>Failure to discuss. (H)</i>
4 changing hands but my involvement was never really		
5 discussed, in spite of me sort of approaching Helena and saying	<i>in spite of Lorna's attempts to raise it - dismissed by Helena</i>	<i>Attempt to discuss. (L) Failure to discuss. (H)</i>
6 'how's it getting on? Where do you see me fitting in to this?'		
7 etc etc and, um, I guess not being a mistrustful kind of person I	<i>Lorna sees self as not mistrustful</i>	<i>L's self-percept: trusting</i>
8 just sort of accepted any, um, excuses or explanations that she		
9 gave me, and it was only when my husband sort of said to me		
10 'hold on a minute, what's going on here?' that I started	<i>Husband raised questions re what Helena was doing</i>	<i>Doubts about H (L's husband)</i>
11 POSSIBLY to think about it. So that was the example that I		
12 was going to give you.	<i>Only then did Lorna even begin to have suspicions</i>	<i>L's reluctance to doubt H</i>
13		

Like Langdridge (2004), we would recommend that you do not try to apply specific theoretical concepts in your coding at this stage; this can lead to your analysis becoming rather blinkered, picking up only on those aspects of the data that fit neatly with your theoretical framework. However, we would expect your broad disciplinary approach to guide you, as well as your research question. If you are a clinical psychologist, for example, you might reasonably pay particularly close attention to sections of the interviews that relate to psychological dysfunction, but you should not use specific concepts from psychodynamic theory, cognitive-behavioural theory (or whatever) to frame your

interpretive codes. The same principle applies if your project is driven by practice or policy issues, rather than by academic theory.

[Figure 10.3](#) shows how we might move from the descriptive to the interpretive codes in the interview extract on the experience of mistrust. As you can see, the two descriptive codes *failure to discuss* and *attempt to discuss* both feed into an interpretive code of *communication issues*. Similarly, the descriptive theme *future business plans* feeds in to *expectation of common goal*. This is because we interpret the former as suggesting that Lorna assumed she and Helena were working together towards the target of creating a joint business venture. In contrast, the interpretive theme *Lorna's naivety* does not stem from particular descriptive themes we had identified. Rather, it is a result of our realisation when looking again at the data that as well as describing herself as not mistrustful by nature, she also suggests that she should have recognised grounds for being suspicious, in the 'excuses' Helena gave her. We felt that although related, the self-perceptions of *trustfulness* and *naivety* are sufficiently distinct to warrant two separate interpretive codes. In this case, we could now go back and add a descriptive code *accepting explanations/excuses*, but it is not essential that you do this.

It is possible for the same descriptive theme to feed into more than one interpretive theme. We see here that *future business plans* relates to *Lorna's trusting nature* as well as *expectation of common goal*. This is because we felt that her comments implied that she accepted Helena unquestioningly, which seemed to us another example of the way Lorna presents herself as 'trusting'. However, if you find that almost all of your descriptive codes feed into several interpretive codes, that would suggest that you have not defined them clearly and distinctly enough, and some revision would be advisable.

As before, you will need to add to, redefine and reapply your interpretive codes as you proceed from one interview transcript to the next, until you feel you have done a thorough job of capturing the meanings offered by the text. In judging when you have reached this point, remember to keep your research question in mind – avoid spending large amounts of time refining interpretations for aspects of the data which are clearly quite tangential to it.

**Figure 10.3** Example of interpretive coding stage

Interview extract	Descriptive codes	Interpretive codes
1 So I was kind of developing this relationship along the lines of,	<i>Future busn. plans</i>	EXPECT. OF COMMON GOAL
2 that we would possibly be running a business together, but as		TRUSTING NATURE (L)
3 the weeks and months went by, um, the business was actually	<i>Failure to discuss. (H)</i>	COMMN. ISSUES
4 changing hands but my involvement was never really		
5 discussed, in spite of me sort of approaching Helena and saying	<i>Attempt to discuss. (L)</i>	
6 'how's it getting on? Where do you see me fitting in to this?'	<i>Failure to discuss. (H)</i>	COMMN. ISSUES
7 etc etc and, um, I guess not being a mistrustful kind of person I		
8 just sort of accepted any, um, excuses or explanations that she	<i>L's self-percept: trusting</i>	TRUSTING NATURE (L)
9 gave me, and it was only when my husband sort of said to me		NAIVETY (L)
10 'hold on a minute, what's going on here?' that I started	<i>Doubts about H (L's husband)</i>	SUSPICION
11 POSSIBLY to think about it. So that was the example that I		NEED FOR CONFIRMATION
12 was going to give you.	<i>L's reluctance to doubt H</i> <i>Doubts about H (L)</i>	TRUSTING NATURE (L)
13		SUSPICION

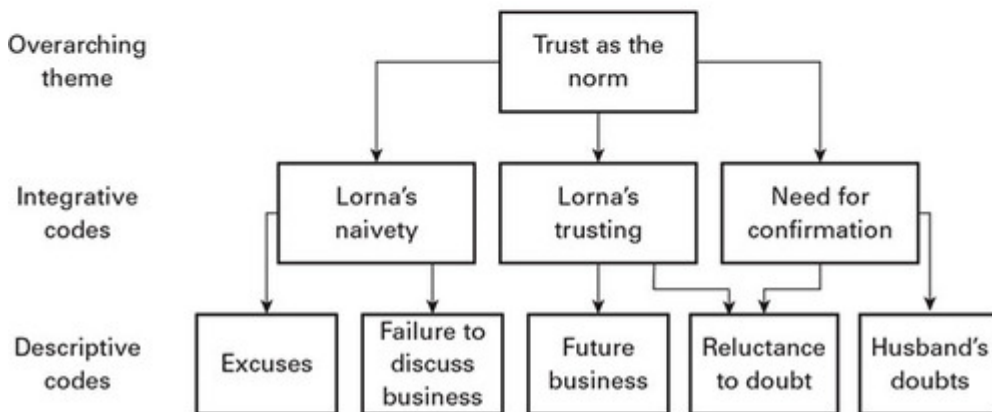
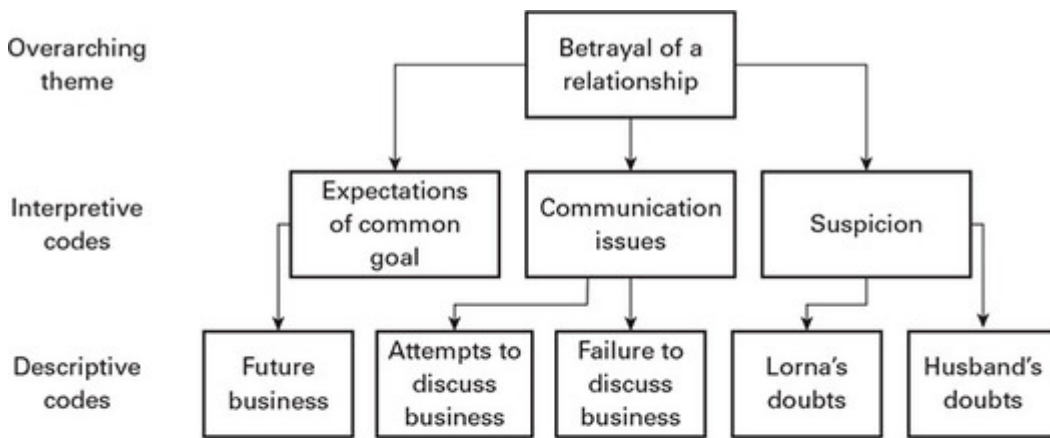
## Defining overarching themes

At the third stage of coding, you identify a number of overarching themes that characterise key concepts in your analysis. These should be built upon the interpretive themes, but are at a higher level of abstraction than them. At this stage you can draw directly on any theoretical ideas or applied concerns that might underlie your study, so long as these are supported by the analysis so far. You would normally try to restrict the number of overarching themes as far as the data will allow; between two and five is probably the norm, although you should not see this as prescriptive. Usually themes are only identified if they apply to at least a substantial minority of cases, but if it would help your overall analysis, you may on occasion choose to define a theme that only occurs in one or two cases. To do this you would need to be able to show that the theme featured strongly in these cases (or case) and that defining it contributed something important to the analysis as a whole. This could be because an issue that is a major focus for one respondent is notable by its absence in all the others, and this comparison reveals something important for the study as a whole. For example, in a study of patient experiences of diabetic renal disease, King et al. (2002) found a major theme of ‘hopelessness’ in just one of the 20 cases. Focusing on this one exceptional case led us to some valuable insights into the coping strategies of the rest of the participants, and what they did to ward off a sense of despair.

In the example shown in [Figures 10.2](#) and [10.3](#), there are two overarching themes that draw upon the interpretive themes we have identified. Of course, in a real analysis you would never base overarching themes on such a short extract of data. The first of these is the conceptualisation of mistrust as a *betrayal of a relationship*. We see this in the way Lorna describes her expectation of an ongoing business relationship (and perhaps by implication a personal one too), and in her focus on Helena’s wilful failure to respond to her attempts to communicate with her. The second theme is Lorna’s portrayal of trust as the norm. She became mistrustful only when a significant third party (her husband) raised suspicions, and in spite of her initially naive acceptance of Helena’s ‘excuses’. To help your readers to understand how your levels of coding relate to each other, it can be very helpful to present a diagram. If you have a large number of descriptive codes, it may be necessary to just show those that most strongly underpin the interpretive ones, though you should acknowledge that you are doing this. In a thesis or dissertation, you would normally be expected to place the full details of identified codes in an appendix. An example of a diagram relating to the mistrust study extract is shown in [Figure 10.4](#).

**Figure 10.4** Diagram showing all three coding levels





## Assessing the quality of qualitative analysis

In quantitative research (as we discussed in [Chapter 2](#)), there are universally recognised criteria for assessing the quality of the analysis in any study. Thus *reliability* is concerned with how accurately any variable is measured, while *validity* is concerned with determining whether a particular form of measurement actually measures the variable it claims to. While there are disagreements over the best ways to assess these and other quality criteria, the use of the criteria themselves is not disputed. Things are very different in qualitative research. There is no general agreement about which criteria to use when assessing quality, or how to apply the criteria. Indeed, some scholars argue against the use of any set criteria at all. This diversity is not surprising, given the range of philosophical, theoretical and methodological positions informing qualitative research (see [Chapter 2](#) for a discussion of these). For many writers, this inevitably means that we need to develop different quality criteria and quality assessment techniques for different qualitative traditions – what Johnson et al. (2006) refer to as a ‘contingent criteriology’.

It is possible to identify three broad positions in relation to the use of quality criteria in qualitative research. First, there are those who argue that qualitative research can and should use the same criteria as quantitative (especially reliability and validity), though with some modification. Second, some argue that qualitative research should use a separate set of criteria from those employed in quantitative research. Third, others assert that qualitative research should not advocate any general fixed criteria at all. We will consider each of these claims in turn, before looking at some of the main strategies used to put various criteria into action.



## Using quality criteria from quantitative research

Qualitative researchers who take this position invariably are working within realist approaches, from which it makes sense to utilise quality criteria that address the correspondence between the ‘real’ world and the researcher’s interpretation of it. Validity is the key concept here, and it is commonly argued that qualitative research is intrinsically well placed to ensure high validity (e.g. LeCompte and Goetz, 1982) because of the way it takes context seriously and grounds its development of concepts in close, detailed attention to the data. Reliability is more problematic, as even realist qualitative researchers acknowledge that the researcher’s subjectivity shapes the research process. This means that one could not expect that the findings produced by one researcher would simply be replicated by a second researcher following the same methodology as the first. As Murphy et al. (1998) point out, it can be useful here to distinguish between ‘external’ and ‘internal’ reliability. The former applies to the kind of replicability sought in quantitative studies, and will always be problematic for qualitative research which emphasises the collection of data in unique natural settings. Internal reliability is defined by Murphy et al. as ‘the extent to which, given a set of previously generated concepts, new researchers would match these concepts with the data in the same way as the original researchers’ (p. 176). This criterion can realistically be addressed in (at least some) qualitative research, as we will show in the section below on ‘strategies for assessing quality’. In your own work you should reflect carefully on the different ways in which it might be appropriate or possible to think about and demonstrate reliability based on the epistemological and ontological stance you are taking in your work (see [Chapter 2](#) for more on this).

## Using alternative quality criteria

Many researchers argue that qualitative research requires agreed quality criteria, but that these should be different from those of quantitative research. This view is promoted especially by those taking contextualist approaches, but is shared by some realist and relativist researchers as well. There is, however, no general agreement as to which alternative criteria to use, with variation in preferences according to disciplinary, philosophical and theoretical commitments. One of the most influential attempts to devise alternative criteria has been the work of Lincoln and Guba (1985). In this, they suggested four criteria as direct alternatives to the main criteria used in quantitative research:

- *Credibility* in place of validity. This refers to the extent to which the researcher’s interpretation is endorsed by those with whom the research was conducted.
- *Transferability* in place of generalisability. This is based on the ability of the researcher to provide sufficient rich detail that a reader can assess the extent to which the conclusions drawn in one setting can transfer to another.
- *Trackable variance* in place of reliability. The conventional notion of reliability assumes a high degree of stability in research settings, such that replication is a realistic possibility. Qualitative research generally assumes that real-world settings inevitably change, and replication is thus unachievable. Lincoln and Guba therefore argue that instead qualitative researchers need to demonstrate that they have ‘taken into account the inherent instability of the phenomenon they are studying’ (Murphy et al., 1998: 170). In particular, they need to try to distinguish between instability that is integral to the research context itself and that which they have introduced themselves through the research process.
- *Confirmability* in place of neutrality. Qualitative research does not pretend to objectivity, rather researchers should present sufficient detail of the process of their data collection and analysis that a reader can see how they might reasonably have reached the conclusions they did.

There have been many criticisms levelled at this formulation, some arguing against specific criteria and some questioning the whole enterprise as inimical to philosophical positions that argue for the existence of multiple social worlds (e.g. Smith, 1984). Lincoln and Guba themselves developed a further set of alternative quality criteria that were more in tune with a relativist position, based around the notion of ‘authenticity’ (Guba and Lincoln, 1989, 1994). Nevertheless, their original criteria remain widely cited.

Yardley (2008) offers what we have found to be a very helpful set of guidelines for thinking about quality in qualitative research (although note that she cautions these should be seen as ‘core principles’ rather than fixed criteria). We would contend that reflecting on how best to interpret and utilise these guidelines for the particular position and approach of your own work is very useful practice for qualitative researchers. Yardley highlights four areas to consider:

- *Sensitivity to context.* Researchers should demonstrate how their work is sensitive to and enables deeper understanding of participants’ perspectives in its particular context and socio-cultural setting. This may include demonstrating awareness of (and reflecting on) any pertinent ethical issues, and drawing on relevant theoretical and empirical literature can also be useful.
- *Commitment and rigour.* Researchers should reflect on their degree of engagement with their data; for example, on the thoroughness of data collection, the depth and breadth of analysis, their methodological competency and in-depth engagement with the research topic.
- *Coherence and transparency.* Qualitative research can be evaluated in terms of the clarity and the power of the argument it presents. Researchers should ensure that there is clear congruency between their philosophical positioning, the theory and the methods utilised in their work. The methods used and data presentation should be transparent, the analysis should be coherent and there should be a convincing fit between the data and interpretations presented. The extent to which there is evidence of appropriate reflexivity is also relevant here.
- *Impact and importance.* Finally, researchers can reflect on the likely value of their work. This may be in terms of practical or applied relevance, theoretical importance or socio-cultural impact.

Recently, a UK-based company set up by a team of academics has developed a series of guidelines (critical appraisal tools) to assist readers of different types of research in evaluating the work presented to them. The Critical Appraisal Skills Programme (2017) includes a checklist for qualitative research – it is primarily aimed at those working in the health-care sector, so researchers working in this area particularly may find this a useful resource.

## **Rejecting the use of quality criteria**

While Guba and Lincoln (1994) argue that even from a relativist position it is possible to develop general quality criteria for qualitative research, others take the view that any such attempt is futile. If one takes the postmodern view that there are no limits and no essential foundations to the ways in which language can construct reality, then it is illogical to suggest criteria for assessing the value of any particular version of reality. The researcher can only offer his or her account as one among many possible competing interpretations, which readers will judge from their own perspectives. This is a coherent position to take, but if qualitative researchers want their work to engage with the world outside of academia it creates difficulties. Those who wish to draw on research to make decisions for policy or practice may be uncomfortable with studies that effectively deny the possibility of applying criteria to assess their quality. However, many taking a postmodernist stance are highly sceptical about notions of ‘applying’ research (Willig, 1999a). They tend to see their engagement with the

wider world in terms of challenging dominant discourses and giving voice to those alternative constructions of reality that have been silenced or marginalised (Johnson et al., 2006; see also Brooks and King, 2017).

## Procedures for assessing quality

There exists a wide range of procedures for assessing quality in qualitative analysis. Your choice of which to use must be consistent with your philosophical and methodological position, though it is worth noting that similar procedures can sometimes be used in very different ways to reflect different stances taken by researchers. We will focus on four main approaches here: the use of independent coders and expert panels, respondent feedback, triangulation, and the provision of **thick description** and audit trails.

### Independent coding and expert panels

It is common in thematic analysis to utilise some form of independent coding as a quality check. In the most positivistic forms of qualitative research, this might involve the statistical calculation of inter-rater reliability, of the kind used in quantitative content analysis or structured observation (Boyatzis, 1998). More often, though, this would not be deemed appropriate, as even realist qualitative researchers generally assume that the unique perspective of the individual researcher will shape the analytic process. The aim of independent coding in most cases is thus not to prove reliability but rather to think critically about the thematic structure they are developing and the coding decisions they have made. It can highlight where analysts' assumptions and expectations might have blinkered them to alternative readings of the data, or where they may have overlooked material that could enrich their interpretation. To a large extent, then, independent coding is here being used as a way of facilitating reflexivity on the part of the analyst.

If you choose to employ independent coding in your analysis, you have three key decisions to make: when in the process you should carry it out, what you should ask your coders to do, and who should do it. Regarding the first question, the most thorough approach would be to carry out independent coding at all three stages of the analysis. If this is unrealistic within the time and resources available to you, your choice should be guided by your judgement of where the greatest threats to the quality of your analysis lie. For instance, if you did not feel confident about identifying descriptive codes, you could concentrate the independent coding on this stage. Similarly, if you were concerned that your knowledge of the topic area might skew your definition of overarching themes, you could make this the focus of the independent coding task.

On the question of what coders should do, we would argue that there are two main strategies that can be used. The first can be called a *code-defining* approach. Here, you and the coder(s) carry out the stage of analysis in question independently and then meet to compare and critically discuss the coding you have produced. In contrast, the second strategy is *code-confirming*, where you provide the transcripts you are using for the task and your coding of them, and ask the coder(s) to critically scrutinise them. The code-defining style might be seen as more rigorous, because it allows less risk of the coder(s) being led by your own coding. It is also usually much more time-consuming to carry out than the *code-confirming* style. It may well make sense to use different styles at different stages, and your choice should also be influenced by who is carrying out the coding. While considering what coders should do, another decision you have to make is how much material they should be given. We would suggest that it is unlikely to be sufficient to just use a single transcript, and the more diverse your interviews are, the more material you are likely to want to provide for independent coders. If you

have purposively sampled distinct groups for your study, you would normally want to include at least one transcript from each group. As a very rough rule of thumb, for a study with ten interviews you might want to use three or four transcripts at each quality check stage.

In many research projects, independent coding is carried out within the team. This is a perfectly acceptable process when using a code-defining approach; team members have the contextual knowledge of the data to enable a thorough debate about how codes should be defined and structured. The first and third authors have used this approach with colleagues (see Brooks et al., 2015; King et al., 2017a) and we have found this a useful process as it necessitates clear agreement and justification for the inclusion of each code, and a clear definition of its use. We would be more hesitant about recommending a code-confirming approach for within team use, as the inclusion of external views is generally required to give such a process credibility. If you wish to use an external independent coder, you might seek a colleague with experience in thematic analysis and at least some broad familiarity with the topic area. Better still (but more time-consuming), you might convene an expert panel that includes people with detailed knowledge of aspects of your study from different perspectives. For example, in a study looking at the decisions family doctors made about referring patients to hospital, the first author gathered a panel including academics and practising family doctors to scrutinise the analytic process (King et al., 1994).

## **Respondent feedback**

Another procedure quite commonly used to assess the quality of qualitative analysis is respondent feedback (sometimes referred to as ‘member validation’). In this, the researcher takes the analysis back to the participants to ask how well the interpretation fits their own lived experience (e.g. Jones et al., 2000; Oxtoby et al., 2002). This is seen by some writers as an ethical and/or political requirement as much as a quality issue, since it allows participants a stronger voice in how they are presented than would otherwise be the case. At the same time there are potential problems with the use of respondent feedback (Barbour, 2001; Ashworth, 2003; Smith and McGannon, 2018). People may have good reasons for denying the accuracy of an interpretation that in fact they recognise as a fair picture – for instance, there may be aspects of their views or actions that are socially undesirable or that they may be concerned about others seeing (colleagues, managers, family members and so on). Equally, participants may sometimes express agreement when they actually are not persuaded that the account is accurate – perhaps because it is flattering to them, or because they do not want the researcher to feel their time has been wasted. If participants were able to look at an interpretation of what they said in an interview and judge it as right or wrong, then why would we bother interviewing them and painstakingly analysing the transcript in the first place?

We would agree with Ashworth’s (2003) view that treating respondent feedback as if it could simply confirm or disconfirm an analysis is an untenable position. However, if such feedback is considered more critically – in effect as a further stage of data collection – then it can be a useful element in strengthening the quality of analysis. More recent writing about the use of respondent feedback has further questioned its use as an ostensibly simple means of validating and verifying findings: the focus instead is on its potential ‘as part of adopting a culturally responsive relational reflexive ethics position’ (Smith and McGannon, 2018). A recent review of the use of respondent feedback in qualitative research (Thomas, 2017) notes that, although this approach is commonly recommended in textbooks, authors seeking participant feedback very seldom describe how or why they did this, or how this impacted on findings. Thomas found very little evidence that ‘member checks’ improved research findings but suggests that they can nonetheless be seen as ‘good research practice’ especially in research with strong participatory or collaborative underpinnings. Should you wish to use the

procedure, you need to decide whether you will return to all your participants or only a subsample of them, and, if the latter, on what basis to select them. You will also need to produce an explanation of your analysis that is sufficiently detailed to give the participant a clear idea of what you did, but that is also comprehensible to someone who may have no prior knowledge of social scientific methodology.

## Triangulation

The concept of triangulation relates to the use of multiple methods of data collection or multiple sources of data to study a particular phenomenon (Mays and Pope, 2000). There are many different types of triangulation proposed in the literature; the distinctions drawn by Denzin (1978) remain widely cited:

- **Data triangulation:** using a variety of data sources within a single study. For example, in a study about children's responses to street crime, you might interview children, parents, youth workers and police officers.
- **Methodological triangulation:** using different methods to address the same research problem. This could mean a combination of qualitative methods (e.g. interviews and **participant observation**) or a mixture of qualitative and quantitative methods.
- **Investigator triangulation:** systematically comparing the data collected by different researchers, perhaps selected to ensure they vary in their relationship to the research topic. Thus you might use one researcher who is a member of the group being studied and one who is not, to compare 'insider' and 'outsider' perspectives.
- **Theory triangulation:** using different theoretical models to make sense of the same set of data.

The claim that triangulation – and especially methodological and data triangulation – enhances the validity of qualitative research is the subject of considerable dispute in the literature. Some writers see it as the best way to avoid the intrinsic limitations of individual methods (e.g. Patton, 2015), while others are sceptical about whether perspectives obtained from different methods or sources within a single study can truly be integrated (e.g. Mays and Pope, 2000) – for instance, if they produce conflicting accounts of a phenomenon, in what sense can they be seen to 'validate' each other? Even if we are reluctant to recommend triangulation as a way of enhancing validity, it may still be valuable as a way of making a study more comprehensive in the way it approaches its subject matter, and (in a similar way to independent coding) can be a useful stimulant to reflexivity on the part of the researcher.

## Thick description and audit trails

The term thick description (which originated with Geertz, 1973) refers to the notion that qualitative researchers should provide detailed descriptions of the phenomena they study and their context. This is relevant to quality assurance as it should help a reader to judge whether the interpretation emerging from the analysis seems consistent with the description presented. Thick description can never be a guarantee of the quality of analysis on its own, since researchers of necessity must be selective in what they choose to present – especially in a relatively short piece such as a journal article. Nevertheless, it is a good guiding principle to try to provide as much detail about the focus of the research and its context as practically can be achieved.

Thick description ideally helps the reader to understand how researchers reached their conclusions from the data available. This can be enhanced by the inclusion also of detail about the development of the analytic process itself, for example by providing illustrations and commentary on the way in

which a thematic coding structure developed over the course of the project. Such details constitute an ‘audit trail’ that documents the development of a researcher’s thinking as their analysis progressed. We would particularly recommend the inclusion of this kind of material in postgraduate theses, where the student needs to convince an examiner that they have reflected carefully on the way they applied their analytical techniques to the data.

## Writing up a thematic analysis

The most common way of organising a report on the findings of thematic analysis is to describe and discuss each of the overarching themes in turn, referring to examples from the data and using direct quotes to help characterise the theme for readers. It is not necessary to refer to every constituent code within each theme – especially the descriptive codes; rather you should focus on those that most strongly illustrate what the theme is covering, and which most effectively address your research question. As Braun and Clarke (2006, 2013) say, the aim is not to merely provide a descriptive summary of the content of the theme, but rather to build a narrative that tells the reader how your findings have cast light upon the topic at hand. The choice of extracts to quote should also serve this purpose:

Extracts need to be embedded within an analytic narrative that compellingly illustrates the story you are telling about your data, and your analytic narrative needs to go beyond description of the data, and make an *argument* in relation to your research question. (Braun and Clarke, 2006: 93)

Choose quotes that highlight the nature of the theme vividly, are easily understood, and where possible give some sense of the character of the speaker – for instance, showing their use of humour, a tone of pessimism, hope or stoicism and so on. On the whole, longer extracts achieve these goals better than very short ones, although there are sometimes brief phrases that sum up a point particularly well and are worth quoting directly. It is usual to present quotes as separate paragraphs and indent them (as we have done above), unless they are less than a line in length in which case they are included in the main text, with quotation marks.

The disadvantage of the conventional theme-by-theme presentation of findings is that it makes it difficult to gain much sense of how individual accounts are shaped. If you are particularly keen to preserve the holistic nature of accounts, an alternative approach is to present findings case by case, discussing relevant themes within each of them. This really only works when you have a small number of cases, otherwise it is likely to become repetitive – and very long. Phenomenological studies looking at four or five cases in great depth are the kind of work that might benefit from this style of presentation. A third option that can be very effective is to select a subset of interviews to present as cases, followed by a theme-by-theme analysis of the full data set. The case examples need to be chosen on a meaningful purposive basis; for instance, they might illustrate two (or more) clear positions within the data, or represent members of distinct participant groups.

## Alternative styles of thematic analysis

As we noted earlier, there are many different versions of thematic analysis used in qualitative research (for more discussion of this, see King and Brooks, 2018). In the remainder of this chapter we will

present two types of analysis that differ in quite important ways from the basic version covered above, and that may be particularly valuable for certain types of research project.

## Template analysis

A template style of analysis was described by Crabtree and Miller (1992), and the approach has been further developed by the first and last authors (King, 1998, 2004b; Brooks et al., 2015; King and Brooks, 2017b). It involves the conventional move from preliminary coding close to the text to higher-order themes, but differs in several respects from our basic form of thematic analysis. At the heart of the approach is the construction of a coding structure – the template – that is applied to the data and revised as necessary until it captures as full a picture of the analyst’s understanding as possible. It is normal to construct an initial template on the basis of a subsample of the data set (e.g. six out of 20 interviews), and then apply that to code subsequent transcripts. Where material of interest in these does not fit well with any of the themes on the initial template, the template is revised, perhaps by adding a theme, or redefining an existing one. The iteration of applying, revising and reapplying the template continues until the analyst feels it is clear and thorough enough to serve as a basis for building an account of the findings. Below we outline some of the main ways in which template analysis differs from systems like the one we described earlier in this chapter.

**Figure 10.5** Template extract from a study of multi-disciplinary clinical supervision in primary care (based on King et al., 2000)



1. Issues re model of supervision
  - 1.1 Contract
  - 1.2 Comparison with other approaches
  - 1.3 Use of 'reflexive cycle' diagram
  - 1.4 Training
  - 1.5 Familiarity with...
2. Practicalities
  - 2.1 Timing issues
  - 2.2 Length of sessions
  - 2.3 Location of sessions
3. Group dynamics
  - 3.1 Atmosphere/climate
    - 3.1.1 Formal/informal
    - 3.1.2 Tense/relaxed
    - 3.1.3 Focused/unfocused
  - 3.2 Cohesiveness
    - 3.2.1 Group as a whole
    - 3.2.2 Subgroups
      - 3.2.2.1 Nurse/doctor
      - 3.2.2.2 Practice-based/practice-attached
  - 3.3 Issues of power and authority
4. Roles in the group supervision process
  - 4.1 Supervisee's role
    - 4.1.1 Issues brought (what and why)
    - 4.1.2 Comfort with role
    - 4.1.3 Helpfulness (or not) of group members' contributions
  - 4.2 Facilitator's role
    - 4.2.1 Comfort with role
    - 4.2.2 Style adopted (inc. adherence to model)
    - 4.2.3 Clarity of role
  - 4.3 Group member/supervisor's role
    - 4.3.1 Comfort with role
    - 4.3.2 Nature of interventions
      - 4.3.2.1 Type
      - 4.3.2.2 Frequency
  - 4.3 Clarity of role

## **Levels of hierarchical coding**

Template analysis does not stipulate a fixed number of hierarchical coding levels. Researchers are encouraged to use as many levels as they find helpful to capture and organise the meanings they identify in the data. Those aspects that provide the richest insights into the topic addressed by the research question will generally be coded in greater depth (i.e. to more levels) than areas of more tangential relevance. Coding to four or five levels is not uncommon. [Figure 10.5](#) shows an extract from a template used by the first author and colleagues in a study of multi-disciplinary clinical supervision in primary care.

The study focused on a group of four staff in a family doctor's surgery who piloted a novel form of group supervision (the staff were a family doctor, a health visitor, a district nurse and a practice nurse). They took it in turns to bring an issue relating to their clinical practice to the group, where another member would act as facilitator to the discussion of the current supervisee's concerns. We observed and taped a number of these sessions and then interviewed the participants. The template extract shows the first four top-level themes produced from our analysis, and their subsidiary themes. As can be seen, the second two – *group dynamics* and *roles in the group supervision process* – encompass a more detailed and deeper (up to four levels) set of sub-themes than the first two. This reflects the richer information relating to these issues that we extracted from the transcripts. Interestingly, in the initial version of the template, the *group dynamics* theme was much less elaborated than it is in the final one. This change is an example of how the iterative process of applying and modifying the template can help researchers recognise the importance of aspects of the data that may at first have been somewhat overlooked.

## Types of theme

Template analysis does not systematically differentiate between 'descriptive' and 'interpretive' coding. In part this is because it assumes that the two can never be entirely separated – any theme must be grounded in what is actually present in the data (and so is to some extent descriptive) but at the same time it accepts that there can be no such thing as 'pure' description untouched by human interpretation. The hierarchy of themes in a template is therefore not one based on a move towards greater abstraction and interpretation as it is in the basic version of thematic analysis presented earlier. Rather, organisation is on the basis of scope, with lower-level themes representing distinct instances or manifestations of the concept identified by the higher-level

1. Issues re model of supervision
  - 1.1 Contract
  - 1.2 Comparison with other approaches
  - 1.3 Use of 'reflexive cycle' diagram
  - 1.4 Training
  - 1.5 Familiarity with...
2. Practicalities
  - 2.1 Timing issues
  - 2.2 Length of sessions
  - 2.3 Location of sessions
3. Group dynamics
  - 3.1 Atmosphere/climate
    - 3.1.1 Formal/informal
    - 3.1.2 Tense/relaxed
    - 3.1.3 Focused/unfocused
  - 3.2 Cohesiveness
    - 3.2.1 Group as a whole
    - 3.2.2 Subgroups
      - 3.2.2.1 Nurse/doctor
      - 3.2.2.2 Practice-based/practice-attached
  - 3.3 Issues of power and authority
4. Roles in the group supervision process
  - 4.1 Supervisee's role
    - 4.1.1 Issues brought (what and why)
    - 4.1.2 Comfort with role
    - 4.1.3 Helpfulness (or not) of group members' contributions
  - 4.2 Facilitator's role
    - 4.2.1 Comfort with role
    - 4.2.2 Style adopted (inc. adherence to model)
    - 4.2.3 Clarity of role
  - 4.3 Group member/supervisor's role
    - 4.3.1 Comfort with role
    - 4.3.2 Nature of interventions
      - 4.3.2.1 Type
      - 4.3.2.2 Frequency
  - 4.3 Clarity of role

## **Levels of hierarchical coding**

Template analysis does not stipulate a fixed number of hierarchical coding levels. Researchers are encouraged to use as many levels as they find helpful to capture and organise the meanings they identify in the data. Those aspects that provide the richest insights into the topic addressed by the research question will generally be coded in greater depth (i.e. to more levels) than areas of more tangential relevance. Coding to four or five levels is not uncommon. [Figure 10.5](#) shows an extract from a template used by the first author and colleagues in a study of multi-disciplinary clinical supervision in primary care.

The study focused on a group of four staff in a family doctor's surgery who piloted a novel form of group supervision (the staff were a family doctor, a health visitor, a district nurse and a practice nurse). They took it in turns to bring an issue relating to their clinical practice to the group, where another member would act as facilitator to the discussion of the current supervisee's concerns. We observed and taped a number of these sessions and then interviewed the participants. The template extract shows the first four top-level themes produced from our analysis, and their subsidiary themes. As can be seen, the second two – *group dynamics* and *roles in the group supervision process* – encompass a more detailed and deeper (up to four levels) set of sub-themes than the first two. This reflects the richer information relating to these issues that we extracted from the transcripts. Interestingly, in the initial version of the template, the *group dynamics* theme was much less elaborated than it is in the final one. This change is an example of how the iterative process of applying and modifying the template can help researchers recognise the importance of aspects of the data that may at first have been somewhat overlooked.

## Types of theme

Template analysis does not systematically differentiate between 'descriptive' and 'interpretive' coding. In part this is because it assumes that the two can never be entirely separated – any theme must be grounded in what is actually present in the data (and so is to some extent descriptive) but at the same time it accepts that there can be no such thing as 'pure' description untouched by human interpretation. The hierarchy of themes in a template is therefore not one based on a move towards greater abstraction and interpretation as it is in the basic version of thematic analysis presented earlier. Rather, organisation is on the basis of scope, with lower-level themes representing distinct instances or manifestations of the concept identified by the higher-level theme. This does not mean that template analysis rejects any distinction between description and interpretation: rather, it treats them as more like the poles of a dimension than a dichotomy. Some themes will be more strongly interpretive than others, and on the whole analysis will tend to become more interpretive overall as the researcher proceeds and grows in understanding of the data. The key point, though, is that recognising a theme as more or less interpretive does not determine where it should be placed within a template.

## Use of *a priori* themes

Template analysis allows the researcher to define some themes in advance of the analysis process – referred to as *a priori* themes. These may relate to important theoretical concepts or perspectives that have informed the design and aims of the study, or to practical concerns such as evaluation criteria that the researcher has been funded to address. Generally, though, it is recommended that researchers do not identify too many *a priori* themes, as this may lead to a blinkered approach to analysis. Template analysis can be seen as standing in between the very 'bottom-up' approaches, such as **descriptive phenomenology** (Giorgi and Giorgi, 2003) and grounded theory (Corbin and Strauss, 2015), and the more 'top-down' styles of the matrix approach described below.

## When to use template analysis

The template approach can be used with any size of study; indeed, the first author employed a version of it in a piece of autobiographical research (King, 2008). However, it is especially well suited to projects with a sample of between 10 and 25 hour-long interviews. It also works well where there are two or more distinct groups within the data set which you wish to compare. Finally, because it allows the researcher to identify some themes in advance, it is well suited to studies which have particular theoretical or applied concerns that need to be incorporated into the analysis.

## Matrix approaches

The use of data matrices within qualitative analysis was pioneered by Miles and Huberman (1984, 1994). Central to the approach is the use of visual displays of the data, which typically tabulate units of analysis (such as individual participants, groups, organisations) against key concepts or issues relevant to the research questions of a study. These displays not only help the researcher to analyse the data – for instance, by facilitating comparisons across units of analysis – but also help to make the process transparent to readers. A number of different matrices may be used at different stages of a study, and there is often a process of data condensation across successive matrices. Thus a first matrix may display analysis with the individual participant as the unit of analysis, enabling comparisons between them to be carried out. In a second matrix, data may be condensed to highlight the distinctive perspective of groups of participants, enabling comparisons between these – for instance, comparing organisations or demographic categories in their perspectives on the topic at hand (see King et al., 2005, for an example of the use of this kind of condensing process). Alternatively, an initial case-by-case matrix may be followed by one that is organised around the key themes themselves in order to gain an overview of how these are patterned across the data set as a whole. An example of this kind of strategy is shown in [Box 10.1](#).

### Box 10.1 Example of stages in matrix analysis

This example comes from a study of users' experiences of a community gym in Halifax, West Yorkshire. The gym was supported by the West Central Halifax Healthy Living Partnership (WCHHLP) with the aim of improving health and well-being in a very deprived part of the town, with a high South Asian (mostly Pakistani) immigrant population. The WCHHLP funded the research (see King and Little, 2017, for more details of this study). Interviews were carried out with 13 gym users as well as three members of staff.

### Level-one matrix

Initially we constructed a matrix that we completed for each individual participant. An extract from one participant (referred to pseudonymously as 'Labib') is shown below in [Table 10.2](#). The completed matrix extended over three pages, with eight main thematic areas defined. Four of the main thematic areas are split into subsidiary areas, including those in the extract. This is because these areas are both rich in terms of the data relating to them and of particular relevance to the aims of the research. Note that although we did not seek to index each instance relating to a particular thematic area, we have used line numbers to indicate where especially useful passages are found in the transcript, to facilitate the selection of quotes at the writing-up stage.

### Level-two matrix

Once the individual level-one matrices were completed for each participant, key themes within each thematic area were identified across the sample as a whole, and these were then summarised in a level-two matrix, an extract from which is shown in [Table 10.3](#) below. This makes it easy for the researcher to recognise patterns of

themes across the data set – for instance, whether certain issues tended to dominate for older rather than younger participants, or men rather than women. In the extract we show the level-two matrix at the point where the first five participants' data had been entered on it (including Labib's).

**Table 10.2**

**Table 10.2** Example of a level one matrix from the Community Gym study

Pseudonym and biographical details	Benefits of using the gym				Facilitators of gym use		
	Physical health and fitness	Mental health and well-being	Social	Educational	Access	Cost	Cultural
Labib (male, age 49, has angina and diabetes)	<p>Significant improvement to health – seen in ability to walk much further than he could before joining gym (35–9)</p> <p>Gives him energy to do more (198–9)</p> <p>At gym, able to push himself more (226–8) – though recognises if pushing self too hard (394–6) – admits sometimes pushes a little bit more than should (439–40)</p> <p>Getting more fit helps him to look younger – others comment on this (286–91)</p>	<p>Having time for himself away from stresses of home is helpful (236–9)</p>	<p>Sees friends at gym</p> <p>Exercising with friends (47–50) or just seeing other users at gym motivates him (229–30, 442–4)</p> <p>Knows local community very well – lived here 36 years – so sure to meet someone he knows at gym (54–9)</p>		<p>Very close to home – important because hasn't got a car, and also time limited by family commitments (102–11)</p> <p>Compares easy access – in middle of community – to difficulty in travelling to previous exercise classes at Spring Hall (378–81)</p>	<p>Low cost – important because he is unemployed (174–9)</p>	<p>Separate male and female sessions preferred by Asian users, though not bothered himself (339–41)</p>

**Table 10.3**

**Table 10.3** Example of a level two matrix from the Community Gym study

Benefits from using gym	Less out of breath	Akash, Habiba (implied by Labib)
Health and fitness	Less back pain	Akash, Malika
Mental health and well-being	Less joint pain	Akash, Malika
Educational	General feeling of fitness	Akash, Habiba, Labib
Social	Re specific illnesses	Amina
	Increased ability to do everyday things	Habiba, Labib
	Weight loss/control	Malika
	Younger appearance	Labib
	Improved mood	Akash, Habiba
	Relief of stress/tension	Habiba, Labib
	Alleviates depression	Amina
	Forgetting about health worries (inc. pain)	Malika
	Learning about wider health issues	Amina, Habiba
	Meets friends at gym	Akash, Habiba, Labib, Malika
	Goes on own	Akash, Habiba, Labib, Malika
	Enjoys social aspect	Akash, Amina, Malika
	Social aspect not crucial to attendance	Akash, Malika
	Feeling part of community	Habiba, Labib
	Motivating effects of exercising with others	Labib
Facilitators of gym use	Convenience of location	Akash, Amina, Habiba, Labib, Malika
Access	Affordable	Akash, Labib
	Separate men's and women's sessions	Labib
Cost		
Cultural	Staff who speak own language	Malika
	Support from family	Malika

themes across the data set – for instance, whether certain issues tended to dominate for older rather than younger participants, or men rather than women. In the extract we show the level-two matrix at the point where the first five participants' data had



to show the level the matrix at the point where the first five participants' data had been entered on it (including Labib's).

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Additional matrices may also be developed to focus on specific issues highlighted in an initial more broadly focused matrix. Nadin and Cassell (2004) provide an illustration from a study examining the nature of the 'psychological contract' between employers and employees in small businesses. Their first matrix presents a broad and detailed overview of participants' views relating to the research topic. From this, they identified the issue of 'incidents of theft' as a type of contract violation that was worthy of further examination, and developed a further matrix focused specifically on this theme.

## Defining thematic areas

We use the term 'thematic area' here to refer to the concepts, issues, behaviours and so on into which the data relating to each case on the matrix are organised. Thus in the example in [Box 10.1](#), based on the community gym evaluation study, the thematic areas include: *joining the gym*, *involvement in other physical activities*, *benefits from using the gym*, and *drawbacks and areas for improvement*. In matrix-based approaches, these are usually defined to a considerable extent on the basis of *a priori* concerns – sometimes theoretical but more often pragmatic (reflecting the strongly applied focus of Miles and Huberman's original work). However, it is generally recommended that the researcher allows some modification to the thematic areas in the light of ongoing analysis. For instance, in the framework analysis approach, widely used in health services research (Pope et al., 2000), 'identifying the thematic framework' occurs after a 'familiarisation' phase, which ensures that the thematic structure is not purely determined by *a priori* issues.

## Coding

The task of identifying material to enter into the cells of a matrix is essentially one of thematic coding. The precise coding techniques to be used are not stipulated, rather the researcher should use whichever seem well suited to the needs of the particular research project. It is worth noting that because matrix analysis tends to be used with relatively large data sets (as discussed below), and often focuses mainly on analyses across groups, sites or organisations, it is not always necessary to code every transcript on a line-by-line basis. Instead, the researcher may, after carefully reading through transcripts, choose to highlight certain sections that most strongly address the concerns of the study at hand.

## Comparing matrix analysis and template analysis

There are certainly commonalities between matrix and template approaches to analysis. Both commonly make use of *a priori* coding categories, and both place an emphasis on the effective visual display of the analytic structure – to aid the analyst's thinking and ultimately to facilitate the presentation of the analysis to readers. At the same time, the approaches differ in significant ways. Matrix analysis is a more 'top-down' approach than template analysis: once the matrix headings are defined, there is usually relatively little modification to them in the course of the analysis. In contrast, template analysis encourages an iterative process of application and modification (as described above), such that even *a priori* themes are likely to be redefined, merged or deleted in the course of the analysis. A further contrast is that matrix analysis does not necessarily rely on line-by-line coding

of the full transcript, while template analysis invariably does. This reflects the ‘broader brush’ nature of the former compared to the latter.

## When to use matrix analysis

A matrix approach is useful where you have a large, complex data set, especially where the research design involves comparisons between sites, organisations or groups. (As a rough rule of thumb, we would consider a qualitative study with 30 or more hour-long interviews to be ‘large’.) Studies with a very strong *a priori* focus invite a matrix approach – for instance, larger qualitative evaluation studies where key evaluation criteria are set in advance. Finally, the less idiographic focus of matrix analysis (compared to other thematic approaches), and the fact that line-by-line coding is not necessarily required, can make this a resource-efficient approach, well suited to situations where time and/or personnel are limited.

In some studies, the optimum analytical strategy can involve a combination of matrix and template approaches. This may be achieved by first carrying out a matrix analysis, to produce a broad picture of key issues in the data (as they relate to a study’s *a priori* concerns) and then carrying out a more detailed reanalysis using the template approach, on elements of the data identified as being particularly rich and interesting. For example, in a study by the first author looking at the impact of involvement in allotment gardening (King, 2012), an initial matrix analysis was carried out, strongly driven by the evaluation criteria of the organisation that had funded the work. Subsequently, a subset of thematic areas that were of especial interest (in terms of potential contribution to the academic literature) were reanalysed in more depth, using a template style.

## Conclusion

In this chapter we have provided you with sufficient information to carry out a straightforward thematic analysis of your interview transcripts, and also described two further types of analysis (template and matrix) that could be useful for you. We strongly recommend that you read more widely around this topic – perhaps starting with our ‘recommended reading’ (below) – before you determine exactly how you will approach your analysis. A key point to bear in mind is that qualitative analysis should never slavishly follow a ‘cookbook’ of instructions; you should always consider the requirements of your own study, both theoretical and pragmatic, and be willing to modify aspects of the analytic process accordingly. While you are relatively new to this area, it *is* probably best to stick quite closely to the guidelines for the particular approach you choose to use, but as you gain in experience you should become more confident in modifying the analytic procedures to suit your needs. So long as you understand how your approach is grounded in the philosophical and/or theoretical stance of your research (and can justify this to others), you should increasingly be able to approach qualitative analysis in a creative way.

### Recommended Reading

Braun, V. and Clarke, V. (2013) *Successful Qualitative Research: A Practical Guide for Beginners*. London: Sage.

Braun and Clarke’s (2006) paper on their approach to thematic analysis, with its clear instructions on how to carry out, is a widely-cited benchmark paper. This more recent book includes their most detailed description of their approach to date.

King, N. and Brooks, J. (2017) *Template Analysis for Business and Management Students*. London: Sage.

A thorough account of template analysis and (despite the title!) of use for any researchers wanting to use the approach, not just those in the field of business and management. Includes chapters on how to undertake analysis and worked examples.

Nadin, S. and Cassell, C. (2004) Using data matrices. In C. Cassell and G. Symon (eds), *Essential Guide to Qualitative Methods in Organizational Research*. London: Sage.

Helpful overview of the ways in which data matrices can be used in analysis, with a detailed illustrative case.