CHAPTER 8

Qualitative data analysis: Grounded theory development

Overview

- Grounded theory was seminal in defining qualitative research as a systematic form of research. It grew out of the work of Barney Glaser and Anselm Strauss in the 1960s although subsequently Glaser and Strauss developed somewhat different emphases in terms of how grounded theory research is carried out.
- Grounded theory is theory which develops out of a close interaction between the data and the developing understanding of the data. The fit between the theory and the data should be close in grounded theory. The process of theory building involves constant checking backwards and forwards between different aspects of the analysis process.
- Typically grounded theory proceeds from the initial data collection and analysis stage to the collection of further new data guided by the initial analysis (theoretical sampling). The process is typically one of line-by-coding of transcribed texts such as interviews or focus groups. These codings are then sorted into categories from which the basic theoretical ideas and relationships can be identified. The process may proceed to other stages including the collection of fresh data to help 'validate' the study's emerging theoretical ideas and to also examine whether the theory is more generally applicable.
- The researcher writes ideas, concepts and other analytic notions in a memo as an aid to theory development.
- Grounded theory probably works best where people's common-sense understandings of the world provide appropriate data to help answer the research question.

- There are a number of criticisms of grounded theory. Some question the nature
 of the 'theory' which emerges, the delay it imposes on the use of theory may
 be counterproductive where there is relevant theory already available, and its
 frequent lack of clarity, for example.
- It is notable that a good proportion of grounded theory studies concentrate solely on the initial theory building stages. These generate the categories which largely constitute the theory in many studies. Some researchers are reluctant to go beyond this stage to test out the theory and hypotheses derived from the theory in order to broaden its applicability.

What is grounded theory?

According to Bryman (2004), grounded theory is the most widely used way of analysing qualitative data. Grounded theory was groundbreaking in the sense of providing a relatively formal but vigorous approach to the analysis of qualitative data. It was a development of the 1960s when among the discontent of academics was the gulf between *empirical* research and theory building as well as the general feeling that *qualitative* research lacked the rigour that academic disciplines require. It grew from the work of the sociologists Barney Glaser (1930–) and Anselm Strauss (1916–1996). While nowadays it is commonplace for qualitative researchers to take great pains to establish the validity of their analyses, such concerns were really the contribution of Glaser, Strauss and grounded theory. (See Chapter 15 for a discussion of some of the many quality criteria that have been proposed by qualitative researchers.)

The first major publication detailing grounded theory was Glaser and Strauss's (1967) The Discovery of Grounded Theory. It can be regarded as both innovative and radical as well as being decisive in undermining the dominant sociology of the time. The book determinedly argued for a close relation between empirical research data and theory to replace the highly speculative grand sociological theories of the time which had little grounding in research data and, equally, the barren wastes of atheoretical empiricism which gave much research a bad name then. Grounded theory essentially assumed that there must be a close link between empirical data and theory building and required that the data analyses which led to the theory and the theory itself were thoroughly tested and convincingly questioned and challenged. Grounded theory provided a way forward in the development of qualitative research - though it never was intended exclusively for qualitative data. There are clearly potential credibility issues in gualitative research methods. A stereotype of gualitative research around the 1950s/1960s would highlight the apparent subjectivity of the analysis process. None of the usual quality checks which pervade quantitative research - issues such as reliability and validity - typified qualitative research at the time. Not that Glaser and Strauss were advocates of reliability and validity in the form that they take in quantitative research. They were uncertain as to whether traditional concepts of reliability and validity were appropriate to grounded theory and felt that they stultify the process of discovery through research. Instead, for example, their approach to validity would include respondent validation – the idea that the theory developed out of research should make sense to those participating in the research. But, of course, there is much more to validation in qualitative research than that (see Chapter 14).

Glaser and Strauss's early work on grounded theory was written at a time when positivism and quantification had the upper hand. Perhaps it then should come as no surprise that Glaser and Strauss wrote of the 'discovery' of theory much as positivist psychologists had sought to 'discover' the laws of psychology. A few years later, the growing idea that scientific knowledge is constructed by researchers rather than discovered by them (Gergen & Graumann, 1996) probably made this view contested in grounded theory. This is one example of how grounded theory has changed over time and is part of the explanation why apparently different factions of grounded theory researchers have emerged. Indeed, Glaser and Strauss parted academic company in the 1990s over the matter of how grounded theory should be done. (Remember, grounded theory incorporates quantitative research although it is regarded primarily as a qualitative analysis method.)

The grounded in grounded theory is fairly straightforward since theory in grounded theory is situated in the empirical work involved in data collection. However, the nature of theory in grounded theory might cause some problems. This is not a problem per se for newcomers to grounded theory alone. The word 'theory' itself is hardly the most consistently applied term in psychology and its meaning just about embraces anything which is not just an empirical relationship. Theory can be a very loosely defined phrase referring to things such as broad principles or personal reflections but it can also involve relatively 'hard' definitions. So theory can also include things such as 'a well-developed system of ideas which integrate considerable amounts of knowledge' and, maybe, 'has the potential for allowing prediction'. Fish (1989) rejects the value of the notion of theory since, in his view, it really refers to 'theory talk' which is a way of thinking about things in research which has acquired 'cachet and prestige'. This can be seen quite often in fashionable conceptualisations in psychology which are major talking points but then fade from researchers' radar screen. So don't worry too much if discussions of 'theory' seem to be beyond your grasp.

One frequently reads the phrase 'middle range' theories to describe grounded theories but this is not a self-evident term either. There is a problem in that many grounded theory analyses do not push the method or its use of data to its limits. Consequently, some of the theory generated by grounded theory analyses fails to represent grounded theory in its fullest meaning as intended in some of the original publications of Glaser and Strauss. It is important to remember that much of the data used in grounded theory analyses consist of 'rich' data from individuals in the form of interviews, focus groups, diaries and so forth. This, then, implies that grounded theory is theory for which these forms of data are pertinent. However the term middle-range theory was put forward by the distinguished American sociologist Robert Merton in his book Social Theory and Social Structure in 1949. The middle-range theory occupies the space between the sort of simple, everyday hypotheses or explanations that researchers use when describing their empirical observations and the relationships in their empirical data and the much more complex, all-inclusive grand theories which are drawn up to explain major areas of life. Actually, it is harder to come up with examples of grand theories in recent psychology than it is to think of middle-ground theories. Most of the best examples of grand theories come

from classic fields of psychology such as Freud's psychoanalytic theory, Piaget's theory of cognitive development, symbolic interactionism, Eysenck's personality theory, Cattell's personality theory, Vygotsky's cultural historical school of psychology and so forth. According to Merton, grand theories do little to guide researchers directly in terms of how to collect pertinent empirical evidence. They tend to be rather abstract and, consequently, somewhat difficult to apply directly in empirical research. For one reason, they were major integrations of many aspects of a particular field of psychology and, therefore, fail to meet the highly specific needs of researchers planning research.

Middle ground is a description which applies to many theories in psychology which are based in data but synthesise a range of studies and findings. Psychology is replete with examples of simple, empirical generalisations which do little than attempt to explain the relationship between a pair of variables. So middle-ground theory goes beyond the requirements of a highly particular piece of empirical research but falls well short of being all-embracing, allencompassing theory. Examples of middle-ground theory in psychology are then numerous. Theories such as the just-world theory, cognitive dissonance, the pathways model of sexual offending, relative judgement theory might all be considered psychological, middle-range theories. These are examples of middleground theory in mainstream psychology *not* middle-ground theory developed from grounded theory. It is not being suggested that middle-range theories in psychology are developed using grounded theory – very few have gained currency to date.

Grounded theory is grounded in particular sorts of data pertinent to the research question. Consequently, we should expect that grounded theories are particularly related to the sorts of in-depth data which can be obtained using focus groups, in-depth interviews, diaries, narratives, newspaper stories and the like. So theories about the different ideologies underlying people's thinking, how different sorts of person interact with others, ways children talk about authority figures in their lives and so forth would be examples of middle-range grounded theories. Middle-range theory is not really a mysterious concept – it is just based on a rather ill-defined idea.

There is another way to theory development in grounded theory – this is known as the 'rewrite' technique. According to Glaser:

One version of rewriting techniques is simply to omit substantive words, phrases, or adjectives; instead of writing 'temporal aspects of dying as a non-scheduled status passage', one would write 'temporal aspects of non-scheduled status passage.' Substantive theory can also be rewritten up a notch: instead of writing about how doctors and nurses give medical attention to a dying patient according to his social loss, one would talk of how professional services are distributed according to the social value of clients . . . In each version of the rewriting technique, the social scientist writes a one-area formal theory on the basis of his substantive theory; he does not generate the former directly from the data. These techniques produce only an adequate *start* towards theory, *not* an adequate formal theory itself. *The researcher has raised the conceptual level of his work mechanically; he has not raised it through comparative understanding*. (Glaser, 1982, p. 226)

In other words, if theory is generated through re-write techniques then its grounding in the data cannot be taken for granted and needs to be assessed against relevant data.

As we will see in detail later, the process of carrying out a proper grounded theory analysis is demanding. The procedures involved are based on constant referral back and forward between the data and the analysis. There are numerous different ways of doing this but none is easy. Not surprisingly, then, some researchers describe their research as being based on grounded theory despite the fact that the work they present shows few indications that the rigorous procedures of grounded theory have been employed. This sort of lip-service to grounded theory is unfortunate since the newcomer to qualitative research may be confused as to what actually grounded theory is in practice. So be wary of the possibility that a study which claims to be based on grounded theory actually is only minimally so. Like all research and especially qualitative research of a high standard, grounded theory methods are exacting, time-consuming and meticulous. They demand close familiarity with the data and such intimacy itself takes a good deal of time and effort to achieve.

The ultimate aim of grounded theory is to develop theory appropriate to the data and justifiable by a close examination of the data. However, much grounded theory research stops short in the development of theory and concentrates on categorisation of aspects of the data. The process of categorisation is fundamental to grounded theory anyway so such descriptive accounts of the data are valuable even though it is difficult sometimes to describe the product as middle-ground theory. Essentially the process involved in grounded theory:

- brings the researcher into close familiarity with their data;
- encourages the researcher to code small elements of the data;
- encourages the researcher to synthesise these various small elements into categories; and
- continually requires the researcher to compare the data with the developing theory (categories) in the analysis.

This process, in the most successful instances, may lead to the development of theory. But it should be noted that the sort of theory that grounded theory generates does not have all of the characteristics which mainstream psychologists, as a whole, regard as the signs of a good theory. In particular, many psychologists assume that a good theory will help them make predictions about what people will do in certain circumstances. This sort of precise prediction is not an aim of grounded theory. The theory developed in a grounded theory analysis may be capable of being applied to new sets of data but it is not usually possible to make causal predictions. According to Charmaz, grounded theory provides the guidelines for the collection and analysis of data which are then used to develop theories which account for and explain that data:

Throughout the research process, grounded theorists develop analytic interpretations of their data to focus further data collection, which they use in turn to inform and refine their developing theoretical analyses. (Charmaz, 2000, p. 509)

The following are some of the important characteristics of grounded theory:

- **Systematic** The process by which theory is developed is through the careful application of the general principles and methods of grounded theory.
- *Guidelines* Grounded theory is essentially a system of guidelines which guide data collection, data analysis and theory building. The emerging research and theory are closely tied to social reality as far as that is represented in the data.

Grounded theory provides a structure to qualitative research	Concepts and ideas that develop in grounded theory are required to be fully developed and understood by the end of the analysis - that is they are saturated which means nothing more to learn		Opposed to grand theorising which is poorly linked to the data	
Grounded theory is a theory- creating process which ties the developing theory closely to the data - hypothesis testing is no part of grounded theory until the final stages	Grounded theory is based on the constant comparison of each stage of the analysis process with earlier stages		Data collection is determined by the needs of a concurrent and continuing analysis of the data	
The data are coded according to an emerging scheme and these codings studied so as to identify major categories		Hypotheses are developed to test emerging ideas with the broad aim of developing a more general, data-based theory if possible		

FIGURE 8.1 Key elements of grounded theory

- Inductive processes are more important than deductive processes This is very different from conventional theory building in psychology in which hypotheses are deduced from theory and these hypotheses are subjected to empirical test. Such an approach to theory building is commonly communicated to psychology students in introductory mainstream psychology textbooks.
- *Theory building is a continuous process* Grounded theory develops theory through a continuous process rather than by critical tests of hypotheses as in conventional theory building. It is impossible to separate grounded theory research into a small number of discrete stages since theory development begins early even at the data collection stage and continues to the stage of writing-up.

Some of the main elements of grounded theory are shown in Figure 8.1.

The development of grounded theory

The popularity of grounded theory over the last 50 years is undeniable. But why? According to Thomas and James:

Grounded theory, and other techniques of analysis in qualitative inquiry are bound to be popular because they meet a need. For while qualitative inquiry is absolutely valid, it is difficult to do . . . it may entail taking part, watching and listening, in schools and other environments. But when all this is done, what comes next? Such ways of doing research can lead to a floating feeling, a lack of direction. What does one do with one's data? Surely one can't just talk about it. Grounded theory offers a solution: a set of procedures, and a means of generating theory. As such, it has become widely used and its reputation as an accessible and thorough explained method in qualitative inquiry has grown and grown. (Thomas & James, 2006, p. 768)

Barney Glaser (1930-) and Anselm Strauss (1916-1996) published their book Awareness of Dying in 1965. Strauss began to work at the medical school of the University of California at San Francisco and gradually realised that hospitals found dying a difficult subject to deal with. He began fieldwork into the topic and hired Glaser to help. The researchers came to the view that the expectation of death both on the part of the patient and the people around him or her had a big impact on interaction between those involved. They distinguished a number of different classifications of this expectation which ranged from open awareness to closed awareness to suspicion and to mutual deception. Nurses had difficulties where the patient did not know that they were dying since they had to avoid revealing it to the patient. The book attracted a lot of attention and, arguably, can be seen as the first occasion when grounded theory was employed in research. Their later book, The Discovery of Grounded Theory (Glaser & Strauss, 1967), was essentially an attempt to describe the method of grounded theory and its limitations. It became one of the classics in sociology and beyond.

Glaser and Strauss were intent on closing the 'embarrassing' (Glaser & Strauss, 1967, p. vii) gap between theory and empirical research in sociology. Interestingly, given this intent, Glaser had been a student of both the arch methodologist of sociology, Paul Lazarsfeld, and Robert Merton, the outstanding theorist, at Columbia University. According to Strauss and Corbin (1994), the book had three distinct purposes:

- To provide a rationale for the grounding of theory in data. That is, a method for developing theory in which the development of theory was part of an interplay with research data.
- To provide a logic for and detail of grounded theories.
- To provide a sound basis for thorough qualitative research in sociology given the low status of qualitative sociology at the time.

Probably out of these three, the final purpose has been the book's most startling achievement and its earliest. As we have seen, grounded theory is often described as being in opposition to the dominant and theoretically highly speculative sociology which emerged and enveloped sociology in the first half of the twentieth century and beyond. More specificially, writers tend to specify the reaction of grounded theory as being to the Chicago School of Sociology. The school developed an ecological approach to the sociology of urban areas. It had a big influence of criminology and contributed some of the earliest approaches to quantification to that discipline. It replaced armchairtheorising with an emphasis on the collection of data and its rigorous analysis. But the theory that developed at the University of Chicago tended to think 'big' in terms of very broad processes which were contributing to social and urban change. In the works of some of the earliest members of the Chicago School were elements which linked sociological change to basic natural science models in ecological research. Human communities were treated as if they consisted of subpopulations which operated in response to similar forces to those in ecological populations. So, for example, a subpopulation would begin to invade a territory and eventually achieve dominance only then to fade when another subpopulation began to succeed in the same territory. But the Chicago School was long-lasting and its influence complex – at the time a massive proportion of graduates in sociology were graduates of the school. One of its influences was in terms of the use of standardised measuring instruments for the collection of data.

Of course, it is possible to see in psychology's quantitative dominance many of the characteristics of the Chicago School. Despite the Chicago School's exploitation of the field setting, the focus was on very broad processes rather than the detail of social interaction. Much the same can be seen in much of the psychology of the twentieth century in the sense that the discipline concentrated on what could be quantified. These tended to be fairly gross abstractions. Charmaz (1995) argues that in sociology the theorist and the researcher were largely distinct roles in early twentieth-century sociology. Something of the same can be seen in the divide between the theorist and the empiricist in much psychology during the same period.

According to Thomas and James (2006), 'grounded theory represented a resolution of different epistemological positions and a solution to a broader problem about perceptions of the status of qualitatively based knowledge in the social sciences' (pp. 767–768). They suggest that symbolic interactionism was declining as a force in the social sciences but, more importantly, the 'hard' science approaches of statistics and structural functionalism which squeezed other approaches powerfully was also somewhat in decline. Grounded theory reversed many of the features of the dominant sociology of the time in a number of ways:

- It established qualitative research as a legitimate venture in its own right rather than relegating it to a preliminary or preparatory stage of refining one's research instruments in preparation for the 'scientifically credible' quantitative study.
- The distinction between research and theory was removed by insisting that theory development and data collection were integral. Data collection and data analysis in the sense of theory development were virtually inseparable. Grounded theory provided methods by which theory development could be validated against the empirical data.

Grounded theory can be seen as a general qualitative methodology which enables it to be adapted to a variety of areas of research. Furthermore, grounded theory requires no particular sort of data so it can be employed with diaries, biographies, newspaper and magazine articles, interviews and more. This clearly means that the potential spread of grounded theory is substantial and its penetration into disciplines such as anthropology and psychology as well as fields such as social work and education not surprising.

One of the major developments in grounded theory was the consequence of Glaser and Strauss going somewhat separate ways later in their careers. That is, the version of grounded theory expounded in *The Discovery of Grounded Theory* evolved somewhat differently in the writings of the two men. This resulted in two options of how grounded theory analysis should be carried out. The split became most evident by the 1990s when Glaser criticised Strauss's then recent ideas and their differences became part of a more general academic debate. Onions (n.d.) provides a comparison of Glaser's approach and Strauss's approach. For example, Onions suggests that in Glaser's approach the good researcher begins with an empty mind (or 'general wonderment') whereas in Strauss's version the good researcher has a general idea of where to begin the research. For Glaser 'the theory is grounded in the data'; for Strauss 'the theory is interpreted by an observer' (p. 8). For Glaser 'The credibility of the theory, or verification, is derived from its grounding in the data'; for Strauss, 'The credibility of the theory comes from the rigour of the method' (pp. 8–9). For Glaser, 'A basic social process should be identified'; for Strauss 'Basic social processes need not be identified' (p. 9). There is more to it than this, of course, but the flavour is captured to a degree by these examples. Perhaps the most telling comparison is that which suggests that for Glaser the characteristics of the researcher are passivity and disciplined restraint whereas for Strauss the researcher is a much more active participant. Furthermore, Glaser's strategy for grounded theory is not exclusively qualitative since anything can be data which the researcher comes across during his or her studies. So quantitative data such as surveys and statistical analyses can be part of the process of theory development in grounded theory from Glaser's perspective. The consequence of all of this is the difficulty in specifying quite what grounded theory procedures are. One solution, of course, is for the researcher to identify which camp they adhere to.

How to do grounded theory

Grounded theory is a means of data analysis directed towards theory development. It is not a specific means of collecting data and a variety of data can be used though textual data are by far the most typical. No particular type of data is required although, as hinted, it does suit some types of data better than others – interview and similar material is well handled by the approach. So grounded theory can be applied to interviews, biographical data, media content, observations, conversations and so forth. It is possible and recommended that the researcher uses a multiplicity of sources in grounded theory. A key characteristic is, of course, that the data should be as richly detailed as possible – that is not simple or simplified. Charmaz (1995, p. 33) suggests that richly detailed data involve 'full' or 'thick' written descriptions. Questionnaires using yes–no and similar response formats do not meet this criterion. As such, data are usually initially transcribed using a notation system – it could be the Jefferson transcription system (Chapter 6) though more typically the transcription is much simpler, such as the orthographic/playscript format.

Grounded theory has been seen as a form of sophisticated filing system (Potter, 1998). In particular, the grounded theory 'filing system' does not simply file items under a range of headings but also provides extensive cross-referencing to other headings or categories in the filing system. So, for example, the grounded theory library catalogue might file the present book under the heading of 'psychology' but it would also be cross-referenced, say, under 'methods' or 'qualitative research'. Potter's analogy is a useful one and serves to remind us that data in grounded theory can be filed under several categories rather than a single one. There are, however, limitations to Potter's analogy:

- The grounded theory 'filing system' may be constantly changed and refined through to the final stages of the research the theory to be found in the report or publication. Most filing systems remain the same until they cease to be useful for example, a library cataloguing system might be revised when there are so many books under the heading sociology because it is no longer a useful way of quickly accessing books. At this point, new subcategories of the category 'sociology' may have to be developed such as sociological theory, industrial sociology, urban sociology and so forth. The system in grounded theory is different the categorisation process will tend to reduce the number of categories, more clearly describe what each category is, and provide a picture of what is going on in the data.
- The grounded theory 'filing system' is developed through a constant process of comparing the data with the filing categories. That is to say, although some of the filing categories may seem to emerge out of inspection of the data, these categories are constantly subject to adjustment, modification and change in the light of fresh data and whether or not the categories make sense. Indeed, the categories may become more inclusive or less inclusive depending on the researcher's revised understanding of what the categories are about.
- Perhaps a trifle oddly, the grounded theory 'filing system' developed in one study may well be abandoned for other studies and new and different filing systems created. Indeed, the researcher may deliberately choose to ignore other grounded theory 'filing' systems in order to see the extent to which new studies generate grounded theory 'filing systems' which are similar or different from previous 'filing systems'.

There is a huge literature from different disciplines on grounded theory as well as numerous examples of its use. As one might expect, this results in some variation in how grounded theory is carried out. Indeed, any researcher carrying out grounded theory will probably develop their own idiosyncratic working methods within the broad procedures which characterise grounded theory.

It is not possible to divide a grounded theory analysis into discrete, independent steps. Although explanations of grounded theory have to be sequential, a grounded theory analysis involves going backwards and forwards between analytical stages very flexibly. This is not a random process but purposive in that it is based on the constant need to check and test the fit of one's emerging theoretical ideas with the data, the codings, the categories and new data. Memo-writing is an important tool step in this. The memo may be as simple as a notebook in which the researcher records theoretical ideas as they develop in his or her thinking through the process of the grounded theory analysis. These notes do not have to be elaborate theoretical speculation since they may include half-thought-out ideas concerning matters that the researcher needs to think about. At a more conceptual level, they may be suggestions as to how codings, categories and concepts relate or link together. A memo can include diagrams if these are the best way of presenting the ideas. Boxes of text linked by arrows where appropriate (like a flow diagram) might be a typical diagrammatic memo. It is useful to record what aspects of the analysis are interdependent as well as identifying possible relationships. A researcher's categories cannot be understood solely in their own terms - they take their meaning also from what they are not. So to understand a category such as 'male' really needs an understanding of other categories such as 'female' from which it derives part of its meaning. This is known as interdependency.

The memo is not totally independent of the data. The memo needs to include the most important and significant examples of data which are illustrative of the more general run of the data. So the memo should be replete with illustrative instances of data plus problematic aspects of it at the particular stage of the analysis. Of course, the researcher new to grounded theory may struggle to know exactly what to include in the memo. It may be useful to note the following in this regard:

If you are at a loss about what to write about, look for the codes that you have used repeatedly in your data collection. Then start elaborating on these codes. Keep collecting data, keep coding and keep refining your ideas through writing more and further developed memos. (Charmaz, 1995, p. 43)

Sometimes memo-writing is described as the intermediary step between data and the theory in the final written report or journal article. Sometimes the advice is to start memo-writing as soon as one recognises something of interest in the data, the coding or the categorisation process. This may be a little late in practice. The general consensus is that the researchers should start memo-writing as early as possible – the sooner the better is the dictum to work with. Hence, some researchers prefer to start memo-writing at the stage of developing the research question.

Characteristically, quantitative researchers seek to reduce concepts to a minimum by developing a small number of concepts which explain as much of the features of the data as possible. A famous principle in quantitative research is Occam's razor which states that the researcher should use no more than the least number of concepts needed to account for the phenomenon in question. Conceptual density (Strauss & Corbin, 1999) is a phrase used to describe the richness of concept development and relationship identification in grounded theory. In other words, this is another indication that theory development in grounded theory is quite different from that in quantitative research. The main stages in the development of a grounded theory are shown in Figure 8.2. You may notice that this figure is rather more complex than any of the equivalent ones in Chapters 7 and 9-12. This simply reflects the characteristics of grounded theory. The key components of the grounded theory method include coding/naming, comparison, categorisation, memo-writing, theoretical sampling and the literature review. The following describes each of these and follows Charmaz's (1995, 2000) procedural recommendations and Bryman's (2004) scheme:

Step 1

Developing a research question Deciding upon a research question is a major step in virtually any research. As any student seeking ideas for a project or dissertation knows, the research question is one of the most difficult aspects of planning research of any sort. The sources of research questions can be many – the opportunity to do research with a particular organisation, personal interest based on experience, matters of public concern, the research literature, and so forth. The research described in Box 8.1 on experiencing symptoms of heart attacks is partially based on (a) the previous research literature and (b) the institutional context in which the authors were working (basically the field of public health). Whether the research was stimulated by personal interest is not revealed by the researchers.

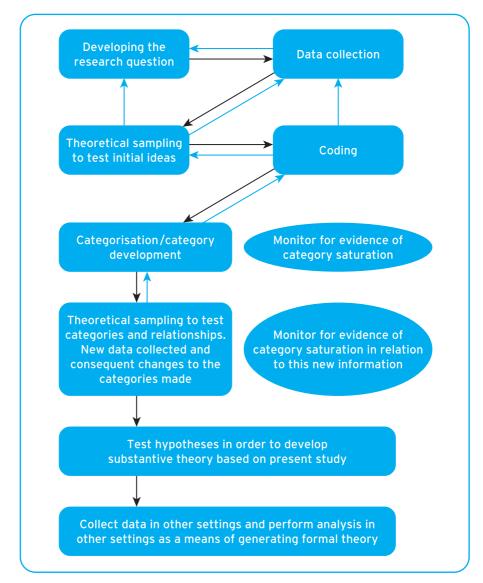


FIGURE 8.2 The process of theory development in grounded theory

The role of the literature review in developing research questions in quantitative research is a very clear and important one – quantitative research ideas are almost invariably justified on the basis of the findings of previous research and theory in the field. The literature review is construed as a preliminary stage in any research and is carried out largely in advance of the new research's detailed planning. In other words, quantitative research is viewed as a process of building new research on the foundations of previous research. In distinct contrast, the role of the literature review in grounded theory does not occupy a similar clear-cut position. Sometimes it is argued that the literature review in grounded theory research should be carried out at the end of the research process. So, rather than stimulating the new research, the literature review is primarily to allow the comparison of the new analysis with previous analyses in that field. This helps ensure that the grounded theory analysis is grounded

Box 8.1 ILLUSTRATIVE RESEARCH STUDY

Grounded theory: when a heart attack strikes

Acute myocardial infarction is a heart attack. The blood supply to part of the heart is stopped, causing heart cells to die. Unfortunately, despite the fact that early treatment for heart attacks can be very effective, death can follow. This, of course, depends on whether the victim recognises the symptoms (such as chest pain, nausea and excessive sweating) of the heart attack very quickly - delays of more than two hours are dangerous. Actually, women are less likely to seek medical attention following these symptoms than men. Understanding the meaning of symptoms of a medical condition is a complex process and, naturally, the symptoms of a heart attack may not be properly recognised the first time it happens. All of this and more led Brink, Karlson and Hallberg (2002) to recognise the importance of victim's thoughts, feelings and actions at the time when the symptoms of the heart attack first hit.

The study took place at a Swedish hospital. The participants were a sample of survivors from a consecutive group of victims of acute heart attacks. They were selected to be a fairly varied group in terms of age, education, employment and the severity of their condition. Equal numbers of men and women were chosen. They had agreed to take part in a tape-recorded semi-structured interview which took place in hospital usually between four and six days after entering the hospital. However, no details are provided in the report about the interviews themselves.

The analysis involved the coding of the transcripts of the interviews and began once the first three interviews had been carried out and transcribed. The coding (labelling) process was guided by three questions from Glaser (1978):

- What are these data a study of?
- What category does this incident indicate?
- What is actually happening in the data?

The authors describe how they questioned and compared the phenomena in the data for differences and similarities which helped the researchers to develop concepts. They explain the development of aspects of their analysis as follows:

An example of an initial category from the present data is 'outside imagination', which mirrored one reaction to receiving the diagnosis 'acute myocardial infarction'. Events that were found to be conceptually similar were grouped under more abstract concepts or categories. Using axial coding, categories and subcategories were linked together at the level of properties and dimensions, e.g. the category 'outside imagination' was placed under the larger category 'illusions of invulnerability'. By answering questions of 'who, when, where, why, how and with what consequences', conceptual relationships among categories were developed... Finally, in the selective coding procedure, two core categories were developed, labeled *acute reactions* and *health beliefs*. (p. 536)

Acute reactions ranged in extremes from *ready to act* to *delay with seeking care*. Health beliefs ranged from *awareness of risks* to *illusions of invulnerability*.

The researchers then began to understand better what was happening in their data which allowed them to focus. That is, the researchers began to realise that the categories of symptom perceptions had a relationship with the two core categories of *acute reactions* and *health beliefs*. These four different perceptual patterns about the onset of symptoms were labelled as follows (Table 8.1):

- Understanding: this is where the victim understood that the situation was serious and that they needed to do something. Acute reactions = ready to act; health beliefs = aware of the risks involved in the situation.
- Amazement: These individuals felt a sense of amazement that the symptoms were happening to them. Acute reactions = ready to act; health beliefs = illusions of invulnerability.
- Misinterpretation: The victim did not link the symptoms to heart problems so they thought that the pains, for example, were due to another problem. Acute reactions = tended to delay; health beliefs = aware of the risks.
- Disregard: Some victims just got on with their normal everyday jobs. Acute reactions = tended to delay; health beliefs = illusions of invulnerability.

The grounded theory analysis was validated using 'very short interviews' with different patients who were asked about 'their thoughts, feelings and actions at the onset of the heart attack' (p. 536). However, no details are provided about how this validated the original findings.

So, this is clearly a study based on the principles of grounded theory. That the researchers go beyond the categories that they work up in their analysis to attempt a theoretical understanding can be seen in the typology of symptom perception based on the broad categories of health beliefs and acute reactions. This could be described as a 'model' - or it would be in quantitative research - but equally it constitutes a theory in the sense that it links together different aspects of the analysis.

		Acute reactions	
		Ready to act (Forced by others, dramatic symptom onset, pain reaction)	Delay (Take medication, wait and see, practical obstacles)
Health beliefs	Awareness of risks (Previous experience, knowledge, common-sense, rational thinking)	Understanding of symptoms	Misinterpretation of symptoms
	Illusions of invulnerability (Can't happen to me, outside imagination, never had such problems, unaware of risks)	Amazement at having symptoms	Disregard of symptoms

TABLE 8.1 Brink et al.'s typology of reactions to heart attack symptoms

Based on Tables 1 and 2 of Brink et al. (2002).

in the new data rather than in previous theory. At the other side of the debate, the literature review is seen as part of development of the new research. Strauss and Corbin (1999) suggest that the grounded theory methodology may begin in existing grounded theory so long as they 'seem appropriate to the area of investigation'. Then these grounded theories 'may be elaborated and modified as incoming data are meticulously played against them' (pp. 72–73).

Ideally, the decision to use grounded theory should be taken very early in the planning of the new research. This is because grounded theory includes methods for sampling which depend on the feedback of the analysis of the first few interviews, for example. Although it is possible to make the decision to use grounded theory after all of the data have been collected, this is not ideal for the reason just mentioned. Grounded theory is about theory development and hypothesis testing of the sort used in mainstream quantitative psychology is not part of the process. One advantage of grounded theory is that it can be used to research areas for which little or no past research is available or where qualitative methods have not been previously used.

Step 2

Theoretical sampling (This may occur prior to starting data collection but alternatively at various stages in the process of data collection.) There are important differences between sampling in quantitative and qualitative methods:

- Qualitative research tends to use small samples for various reasons but especially because data collection and analysis is so demanding that large samples are impracticable. There is generally no assumption that samples in qualitative research are in some way representative.
- The qualitative researcher seldom knows the characteristics of the population so true random sampling is not feasible.
- Not all participants can be regarded as equal in terms of their contribution to understanding social phenomena. Some people make poor sources of information because of their limited observational, understanding and interpretational skills. The quest for 'rich' data would suggest that certain sources are to be preferred over others. This is not an assumption made by quantitative researchers in their sampling. Marshall (1996) likens this to the situation in which one's car has broken down. Who would you prefer? A passer-by selected at random or a car mechanic?

Grounded theory probably has the most different approach to sampling of all. In grounded theory sampling is usually determined on the basis of the theories one builds up to interpret the data over the period of the grounded theory analysis. This is known as theoretical sampling. Because of the intimate contact of the grounded theorist with their data from the time at which data are first collected, they will be reaching tentative interpretations of their data at various stages before data collection is complete. It is these interpretations which drive the need for further data and further sampling. So the researcher would decide on what further data should be collected on the basis of their evaluation of what additional data would help them in their interpretations. The choices are, of course, between seeking data which might challenge their interpretations but, equally, it might help them elaborate their emerging interpretations (or, in other words, theory).

Put another way, theoretical sampling is about how to validate the ideas developed during the memo-writing process which is continuous through the development of a grounded theory. If the ideas that the researcher has noted in the memo are sound and have validity then one should be able to test them by coming up with suggestions about the sort of circumstances in which they apply and the circumstances in which they don't apply. This might involve selecting a participant(s) for inclusion in the research because they might throw up difficulties for one's developing theory. These difficulties might require the researcher to reformulate their ideas or to limit their range of applicability, for example. The task of the researcher is partly to suggest to which samples the theory applies and where it does not apply. It is not simply new sample members who might be recruited; grounded theorists might use theoretical sampling to guide them to other aspects of their data for consideration in the light of the theory. Equally, the researcher may seek new situations to examine whether or not the developing analysis applies there. The point is that such additional sampling of people, situations or data should feed into subsequent memowriting and theoretical development. In this way, the memos and the ideas therein become ever more closely embedded or grounded in the data.

Although theoretical sampling may apply throughout the range of stages of a grounded theory analysis, it is equally applicable to the initial selection of sources and sites for the initial data collection. Since it is likely that the researcher has some preliminary ideas of what sorts of people or situations will be the most productive in terms of theory development, theoretical sampling applies to the earliest stages of grounded theory research.

Step 3

Data collection Grounded theory takes a very generous perspective on what constitutes data. Typically, in grounded theory analysis, the researcher will begin with a quantity of textual material – the data. This may be in the form of documents; material from the newspapers, magazines or the Internet; or, possibly the most likely, transcripts of in-depth interviews, focus groups, and the like. Indeed, it can be appropriate to incorporate several different forms of data. Of course, probably most grounded theory research would use primary sources such as the above-mentioned interview and focus groups.

Step 4

Coding/naming The data are then subject to a lengthy, complex and demanding close examination by the researcher. In order to achieve this, the researcher undergoes a line-by-line analysis of the text and essentially scrutinises each line for meaning. Each line is numbered sequentially for convenience and reference purposes. Coding is achieved by giving each line of the analysis a descriptive code or codes. (Although the coding usually goes line-by-line, there is no reason why other units of analysis such as sentences, paragraphs, speaking turns, etc. could not be used.) Basically these codes are at a level of abstraction which essentially describes what is in that line of text/data. Sometimes the code is very closely related to the data but, ideally, since the end product is a theory abstracted from the data, codings should aim at a higher level of abstraction than mere description as that is where the theory is going. This is referred to as coding the data. While, in terms of reading about coding, one imagines that this calls for some sort of insightful, meaningful and sophisticated description, in reality the researcher will largely use at least some relatively mundane descriptions. Remember that each of these initial codings is based on just a few words of data and so is likely to be fairly close to the data at this stage. There simply is not enough information to go beyond this. It is also important to understand that these codings are likely to be different for different researchers using exactly the same data. The differences may be simply the words used and essentially the researchers are saying the same thing in different ways. Nevertheless, sometimes the differences may be more fundamental than that. Basically, then, each line's coding describes what is happening in that line or, in other words, what is represented by that line. Coding in grounded theory is therefore the creation of codes and not the application of pre-specified codes as it would be in content analysis. Another way of describing coding, according to Potter (1997), is that it is a process of giving labels to the key concepts or ideas which appear in a particular line (or paragraph, etc.). The main point of coding is to keep the researcher's thinking firmly on the ground of the data. According to Charmaz (1995), line-by-line coding helps the researcher to avoid the temptation of over-interpreting the data such as by attributing motives to the speaker in the text.

The end point of coding in grounded theory will leave the researcher with pages of text and each line coded with a description. It is likely that the researcher will emerge from this stage with broader ideas about what is going on in the data – maybe ideas of how the different codings actually fit together, which codings are much the same as each other despite using different labels, and so forth. The researcher would normally make a record of these ideas in the form of a memo. (See the above section on memo-writing.) There is no reason why the researcher cannot revise any of the codings at any stage during this process.

There are several types of coding that are involved in grounded theory. The most important among these is:

• *Open coding* This is the form of coding described above which works as closely to the original data as possible. It is sometimes known as *in vivo* coding because of this.

The next two forms of coding are more about finding relationships among the open codings.

• Axial coding This is the process of relating codings (categories and concepts) together. It is, in a sense, the second major reworking of the data, though the emphasis is on the open codings much more than the data. Both *inductive* and *deductive* reasoning may be involved in the creation of axial coding. Axial coding is about relationships between different aspects of the developing theory. It is about organising the initial codes and identifying key concepts. It is a somewhat controversial feature of grounded theory, with experts disagreeing about its relevance and value. It is key to Strauss and Corbin's (1998) methods but rejected as optional by others (e.g. Charmaz, 2006). Axial coding may be facilitated by any method that helps juxtapose the open codings in a way which helps the analysis. So, for example, writing the open codings which seem to be similar. Shuffling slips of card and paper on the floor or a desk is much easier than shuffling ideas around in one's mind.

• Selective coding This is the process by which the researcher identifies a category to be at the core of the analysis and relates every other category to that category. It basically involves the development of a major theme or storyline around which all other aspects of the analysis are integrated.

These two latter forms of coding dominate in the next step.

Step 5

Category development through comparison/constant comparison The line-by-line codings obtained earlier represent the starting point of the conceptual analysis of the data and are best seen as a preliminary process in developing grounded theory. These codings need to be organised into categories incorporating several codings. In this way, a conceptual synthesis of the codings begins to develop. The categories need to stay true to the original codings: there is no sense in which the codings should be forced into categories which they do not fit well and there should be no arbitrariness in the categorisation of codings. In other words, although codings are an early step in developing theory, they are too close to the detail of the data to provide, in themselves, a satisfactory synthesis of what is happening in the data. Codings constitute the smallest formal unit in a grounded theory analysis and by combining them appropriately we may move on to a better perspective about how to understand the data. So the process of building codings into categories or inducing categories from the codings is crucial to theory development.

Of course, the combination of data into broader categories is a common feature of analysis in quantitative research as well as qualitative research. For example, in quantitative research statistical procedures such as factor analysis and cluster analysis are used in order to provide the researcher with ways of grouping variables essentially into broader categories. Such statistical techniques are not generally available to qualitative researchers. Furthermore, this sort of statistical/empirical classification process in quantitative methods concentrates on what the data share rather than considering the data in their entirety. That is, it draws up categories based on correlations and ignores anything not based on correlation. Put another way, category development in quantitative research involves neglecting a great deal of the data which do not correlate across variables. In qualitative research, the aim is to synthesise all aspects of the data into an analysis.

In addition, the categories need to be understood as fully as possible by the researcher whose tasks include labelling the categories effectively so it is clear what the category is about. All of this means that the researcher may need to work tirelessly on their categories since this level of analysis moves the analysis towards theory development. Furthermore, the categories need to be compared to ensure that they do not overlap. It is a possibility that categories given different labels are actually much the same thing. So, for example, the researcher might begin to recognise that their category of 'anti-democratic principles' is redolent of existing ideas and theory such as 'authoritarianism'. While grounded theory analysis in one of its versions (Glaser's) should not be influenced by the research and theory may have some impact on category development.

There are two important principles which are essential to understanding category development in grounded theory. They are *constant comparison* and *category saturation*. Each will be discussed in turn next.

To take constant comparison first, this is a process of critically checking any aspect of the analysis against other aspects of the analysis. The object is to critically assess the extent to which these different aspects work in relation to each other. By checking to see how well the elements of the analysis fit, gel and articulate together and making changes and adjustments wherever necessary, the analysis begins to develop coherence, leading to refinement in the analysis. If we take the line-by-line codings, constant comparison would involve the researcher checking things such as:

- Do differently coded lines have different content or have different codings been used for much the same content?
- Do similarly coded lines have similar content or are the same codings being used for very different things?

Furthermore, the comparison process can be used more widely in assessing theory development. For example:

- Interviews with people occupying similar roles in an organisation could be compared in terms of their experiences of the workplace how they account for their actions within the workplace, for example.
- Comparisons between one data set and another or even one study with a further study.
- Comparisons of categories derived from the codes with the original codings.
- Comparisons of any aspect of the grounded theory analysis with the original data.

Unlike quantitative analysis, grounded theory does not condone forcing ill-fitting categories onto data. Instead the categories, etc. of the analysis are reconsidered and modified to allow a better fit with the data. Glaser wrote:

Comparative analysis can also be used to compare conceptual units of a theory or theories, as well as data, in terms of categories and their properties and hypotheses. Such conceptual comparisons result... in generating, densifying and integrating the substantive theories into a formal theory by discovering a more parsimonious set of concepts with greater scope. (Glaser, 1982, p. 228)

So it should be clear that the term 'comparative' is used somewhat differently in grounded theory from the way it is used in psychology and the social sciences in general (Glaser, 1982). In grounded theory comparison serves the process of theory generation and the comparison processes may include ensuring the accuracy of the evidence, specifying a concept, checking a research hypothesis, etc. Comparative analysis can involve social units of any size ranging from individuals through to nations and world groups.

We can now turn to the other important concept: saturation. The concept of category saturation is used in grounded theory to indicate the point at which the analysis can go no further. This is the point at which doing further comparisons, etc. fails to necessitate further refinements to the theory. The concept of saturation can be used in relation to decisions about whether or not to terminate data gathering – especially helping the researcher decide whether to interview additional participants. When additional interviews cease Step 6

Step 7

to generate anything of substance which is different from what has emerged before, then this is likely to be the appropriate moment to stop recruiting new participants. It is somewhat like searching the Internet. Google for 'grounded theory' and thousands of web pages will be listed. However, in a sort of law of diminishing returns, you will find that you learn everything of importance from the first few websites you visit and that eventually new pages turn up nothing but familiar stuff. That is the time when the web search would be over. Much the same happens in grounded theory analysis.

Saturation as applied to the categories being developed (category saturation) occurs when after many comparison steps the researcher finds that the categories do not change and nothing new is being learnt about the categories. The key thing is that grounded theory is about theory development and when one's analyses (comparisons) cease to develop one's theoretical understanding then there is no point in further analysis. It should be stressed that theoretical saturation applies to *all* of one's categories at the same time – not partial sets of categories.

Theoretical sampling, etc. to test categories and relationships During this stage of the analysis, there is still work to be done to check the theory against the data. The principles of theoretical sampling are again employed to seek new data to test the adequacy of the relationships which have been identified during the process of the analysis. One is not merely seeking evidence that will confirm what has emerged but also evidence which may bring about a questioning of the theory and its concepts together with a possible revision of that theory or of some of the concepts.

Test hypotheses in order to develop substantive theory based on the present study A theory based on categories and relationships between categories is clearly of value. However, such a theory would be more useful if it allowed us to go beyond the basic theory to develop hypotheses about how the theory relates to other aspects of the thing being researched. For example, when Glaser and Strauss's book *Awareness of Dying* was discussed earlier it was pointed out that there were several different categories of awareness possible: open awareness, closed awareness, suspicion and mutual deception. These categories became much more interesting when Glaser and Strauss found that these different categories of awareness of dying affected the ease of interaction between medical staff and patients. The testing of this 'hypothesis' and its confirmation extended the grounded theory towards being a substantive theory.

Step 8

Collect data and perform analysis in other settings as a means of generating formal theory The grounded theory has now been generated in a particular sort of research setting. Does the theory have any potential to be useful in other research settings? Of course, this potential partly depends on the nature of the theory that has developed. But, for example, the theory described in Box 8.1 concerning the perception of symptoms of heart attack might have some relevance to the perception of cancer symptoms, for example, or the way we respond to bad medical news in general. The more that the theory generalises to other situations, the closer it comes towards being a formal theory about a particular phenomenon. Many researchers do not take grounded theory to this stage.

When to use grounded theory

Grounded theory is explicitly a way of developing theory so that it closely fits the data on which it is based. It is not a data collection method as such even though it has a lot to say about what data ought to be collected as the analysis proceeds. Unlike several qualitative analysis methods in this book (e.g. discourse analysis and narrative analysis) it is not associated with a particular sort of content. The grounded theory approach changed the way of carrying out qualitative data analysis forever. It is possible to see elements of grounded theory in most of the methods described in other chapters. What is not so evident is when one would use grounded theory in preference to the other methods described in this book. Grounded theory places considerable intellectual demands on the researcher and proper training in the method is reputed to take quite a number of months. Furthermore, the grounded theory approach of combining data collection with data analysis in a sort of interactive way is not the easiest of things to do either practically or intellectually. It is perhaps unsurprising to find that not every researcher who claims to use a grounded theory approach to data analysis seems to adhere to all aspects of its rather demanding methodology.

What sort of research aims does grounded theory have the most to contribute to? According to Potter (1998), it works best when the issues involved are easily handled from the perspective of 'a relatively common sense actor'. In other words, where the theory developed is pretty close to the 'everyday notions' of the participants in the theory. Perhaps this is inevitable in any research which gives a 'voice' to the participants in the research. Put another way, grounded theory may simply codify the ways in which ordinary people understand and experience the world. But if Potter is correct, this implies that grounded theory does not amount to much of a method of data analysis at all. This, perhaps, belies some of the complexity of the approach. Possibly Potter is referring to cases of grounded theory analysis which fail to achieve more than a basic level of abstraction.

It is probably not unexpected, then, to find that grounded theory is often used in relation to medical illness and interpersonal relationships. These are topics readily amenable to the common-sense inputs of the participants in the research. But, equally, what is amenable to the common-sense interpretations of research participants may well be the sort of research which policy makers find meaningful. That is, the less abstract the theoretical contribution of the researcher is because it is closely tied to common-sense understandings, the easier it is for the policy maker to make use of the theory. The participants, the theory and the policy maker are all 'on the same wavelength'.

This is a slightly depressing view of grounded theory and, perhaps, needs some revision since it implies that grounded theory is rather limited. Grounded theory is not quite so directly tied to particular sorts of data and research as many of the other data analysis methods in this book are. Conversation analysis, discourse analysis, interpretative phenomenological analysis and narrative analysis link analysis with a particular sort of theoretical perspective. This can be seen as a strength but it is also a limitation. Grounded theory is a way of developing theory – it is a theory of data analysis rather than any substantial area of psychology, for example. This makes it very different in scope. So it primarily offers itself to researchers who wish to develop theory without staking a claim as to its pre-eminence in this field. In a sense, its nearest rival for the attentions of the qualitative researchers is thematic analysis which may well generate

analyses which can seem very like those of grounded theory. This is not a surprise as they share some of the same procedures. Nevertheless, grounded theory encourages the researcher to go rather further in theory development than does thematic analysis.

Grounded theory offers intellectual stimulation and challenge to researchers rooted in the methodology of mainstream psychology. There is virtually no characteristic of mainstream research in psychology which is not reversed or revised in grounded theory. Not that grounded theory would be antagonistic to using some of the findings of mainstream psychology – relevant information is relevant information in grounded theory – but it would consider that mainstream psychology's approach to theory generation is relatively crude and unproductive.

Evaluation of grounded theory

Grounded theory, implemented in full, is clearly a demanding process. In its fullest form, the resources that it requires may be beyond a student researcher. Nevertheless, the first few steps of grounded theory are reasonably practicable in terms of student research. The impression is that substantial numbers of self-styled grounded theory analyses tend to adopt this 'lite' version of the procedure. That is, the analysis ceases when a 'theory' based on the initial codings has been developed that the researcher finds satisfactory. Grounded theory demands a thoroughness of approach and analytic work which should help students avoid the familiar qualitative research failing 'of trawling a set of transcripts for quotes to illustrate preconceived ideas' (Potter, 1998, p. 127).

When reading some grounded theory analyses, one may not always be convinced that the analysis emerges from the data rather than from such preconceived ideas. However, this risks evaluating a research method in terms of poor examples of the method rather than its better achievements. The more transparent research publications are about the details of the methods employed the better as this will contribute to maintaining high standards.

The case for grounded theory includes the following:

- Grounded theory provided an alternative to the hypothesis-testing approach in research. The hypothesis-testing model of research was dominant in quantitative psychology in the 1960s when grounded theory was first developed. (Of course, hypothesis testing is still very important in mainstream psychology.)
- Grounded theory was influential since it helped base qualitative research on systematic research procedures.
- Because much of the theory generated using grounded theory is closely tied to what research participants say, grounded theory speaks in a voice that is readily understood by people, including policy makers and practitioners in many fields. In other words, grounded theory theories are highly amenable to use in areas of social and public policy.
- Rather than qualitative research being seen as an initial exploratory stage in research, grounded theory showed that qualitative research could be effective in theory development. It encouraged the valuing of detailed qualitative research.

Among the criticisms of grounded theory are the following:

- The potential for collection of data is endless in grounded theory and virtually any textual or spoken material could be subjected to a grounded theory analysis. Because theory development occurs after the data have begun to be collected, theory cannot guide the subject matter for a grounded theory analysis. So there is a sense of any research area will suffice – the theory will emerge.
- Grounded theory almost requires that theory development is delayed until after data collection has begun which makes it difficult to build theoretical depth rather than a multiplicity of theories.
- Vagueness surrounds some of the procedures of grounded theory. Not surprisingly the theory is relatively vague about the mental processes that are involved in theory development compared with the practical steps that the researcher carries out alongside this. It is much easier to describe the process of coding than to explain how to come up with ideas for coding. At another level, grounded theory is far less clear about the processes involved in testing a theory than about those involved in generating theory. The examples in Boxes 8.1 and 8.2 are either silent about the testing process or somewhat vague perhaps reflecting this criticism.

Box 8.2 ILLUSTRATIVE RESEARCH STUDY

Grounded theory: bullying in the workplace

Workplace bullying has serious effects on its victims. It may seriously affect their ability to maintain social contacts, his or her reputation, professional status, health and so forth. Strandmark and Hallberg (2007) argued that most research on bullying concentrated on issues such as the prevalence of bullying and the relationships between the bully and victim. They suggest that research largely neglected the experience of being bullied.

The researchers employed grounded theory. They recruited their participants from newspaper advertisements and a website. Participants were selected to be heterogeneous in their characteristics. The open-ended interviews were based on an interview guide which included the following themes:

- Thoughts and feelings related to bullying.
- The psychosocial work environment.
- Working group.
- Perceived health.

The interviewing process involved probes and clarification questions. The first 15 or so open interviews were carried out alongside simultaneous data analysis. This analysis used coding, memo-writing and fairly standard grounded theory procedures:

The initial coding process, which started as soon as the first interview was transcribed, was carried out close to the data on a line-by-line basis, while the focused coding took place on a more conceptual level. Constant comparisons were made between different parts of the data, different incidents and experiences, and between different emerging concepts to explore similarities and differences in the data. The preliminary categories were saturated in subsequent data collection. Theoretical sampling was conducted to refine each category and to saturate the categories with information. Thus, saturation meant that additional data did not add new information. During the entire process of analysis, conceptual relationships between categories were hypothesized, sought, and verified in the data. A core category, central to the data, was identified that determined the emerging theoretical framework. (p. 5)

Theoretical sampling was, of course, based on the emerging findings of the data analysis. According to the authors:

This [theoretical sampling] was carried out either by re-analyzing collected data, going back to informants for additional information, or by interviewing new informants until new data did not add new information. (pp. 4-5)

The analysis of the data led to a core category (central theme) which the researchers labelled 'being rejected and expelled from the workplace'. This basically is the 'story' which emerged from the data - the process by which the victim of the bullying experienced a resolution of the conflict through rejection and expulsion. Of course, other categories were associated with this overriding theme:

- Changing a person's image by means of slander: this refers to the slander and backbiting spread among colleagues in the workplace about the victim of the slander.
- Betraying a person through deceit: this refers to the feeling of being deceived by others in the workplace who appeared to be on their side but who failed to deliver support for them. This included immediate colleagues, union representatives and staff in personnel.
- Devaluing a person through insults: this refers to the negative actions of others which were specifically designed to devalue the victim. The victim felt stigmatised by the bullying and began to feel worthless.
- Legitimising bullying through unjust treatment: this refers to various unfair practices applied against the victim of bullying. For example, one participant complained that she wanted time off to help her prepare her son for a school examination and was refused. On the other hand, another colleague was given ten days' leave for her 60th birthday party!

And there was another category in which the victim could temporarily gain relief from the social support of their family:

• Mobilising power through support: this was the support that the victim sometimes received from their family and, to a lesser extent, managers and others in the workplace.

The authors bring these elements into a conceptual model which ends in the state of being rejected and forced out of the workplace (see Figure 8.3). The authors do not explain the snaking pattern within the diagram.

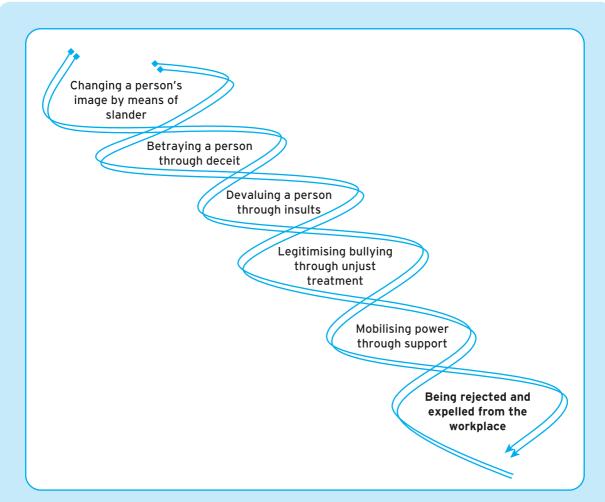


FIGURE 8.3 Strandmark and Hallberg's (2007) model of the process of rejection and expulsion from the workplace. (*Source*: Strandmark and Hallberg (2007))

In many ways, this study presents a relatively complete grounded theory study. Certainly it shows the interplay between data collection and data analysis which characterises grounded theory. Perhaps where it fails is that once the theoretical model has been presented (that which is summarised in Figure 8.3) then the process does not go on to establishing a more formal model which is applicable to workplace bullying in other types of research setting. The authors are aware of the need to do this but fail to go to this final step in grounded theory. In other words, the grounded theory analysis stops early compared with the process described in this chapter and summarised in Figure 8.1. While this is a common occurrence in reports of grounded theory, it is still not the complete process. However, the paper describes a grounded theory analysis which is substantially complete compared to many.

The researchers actually present a literature review both before the study was carried out and to some extent afterwards. This raises an interesting question since the prior literature review simply identifies that the experience of workplace bullying is under researched compared with other aspects of bullying. So in a sense, the prior literature review cannot affect the analysis of the data because the prior literature fails to address this issue. So maybe these are circumstances in which the *a priori* literature would be acceptable to all grounded theorists.

- Many of the aims of grounded theory are to be admired but the method risks providing an excuse for an inadequate qualitative analysis of data. There are no guarantees that grounded theory will produce outcomes which are of any value. Of course, this is true of any of the other methods described in this book. In itself, grounded theory primarily provides a means of processing data in a way which promotes abstract conceptualisations by the researcher which possibly may result in valuable theory. Grounded theory involves a great deal of hard work which is difficult to abandon no matter the outcome of the process since so much time and effort has been involved. The criteria for deciding the value of a theory are not really apparent in grounded theory.
- Grounded theory might be a 'fail-safe' method of data analysis in circumstances where a researcher has data but has failed to develop appropriate research questions. The lack of other options for analysis may mean that grounded theory is adopted but not for positive reasons.
- Grounded theory concentrates on the development on theory and tends to reject prior consideration of theory in the field because these prior theories may 'sully' the analysis. But there are many circumstances where well-developed theory is available. For example, discourse analysis and conversation analysis both have well-developed theory based on qualitative method. Why not employ this theory? Or should grounded theory be reserved for circumstances in which there is no relevant theory? Both the examples in this chapter (Boxes 8.1 and 8.2) use grounded theory when relevant qualitative theory is unavailable.
- Grounded theory methods encourage the analysis of text on a line-by-line basis. These lines are the result of arbitrary divisions too. So they can be fragments and not even complete sentences. This may encourage the researcher to concentrate on rather small units of analysis. This is rather different from the use of larger units of text which are typically used in discourse analysis (Grbich, 2007; Potter, 1998). This limitation of grounded theory makes it a less comfortable 'bedfellow' for other methods of analysis than would be apparent in the literature. Of course, this is a problem created by the process of line-by-line coding and may not necessarily be a big problem in practice since other levels of analysis (e.g. those in the memo) may be employed. Indeed, when one considers Glaser's lack of enthusiasm for audio-recording and his view of transcription as being time-wasting (Glaser, 1998), this suggests that the researcher's awareness of the content of an interview and their conceptualisation of this can be important aspects of grounded theory - and it is not based on the finicky close analysis usually found in grounded theory studies.
- It may sometimes be difficult to differentiate between the outcomes of a grounded theory analysis and a thematic analysis (Chapter 7). While a thematic analysis is a categorisation process with no great aspirations to theory development, grounded theory analyses may sometimes come up with much the same sorts of data categorisation scheme. Unless the grounded theory analysis goes beyond this by using theoretical sampling and so forth then an opportunity has been lost. But who can guarantee that there is more in one's data than thematic analysis can elucidate?

Of course, our question here is the relevance of grounded theory for psychological research. Howitt and Cramer (2008) pointed out that some grounded theorists write of it as if it is inimical to certain sorts of theory development in psychology. Strauss and Corbin wrote specifically that:

... grounded theory researchers are interested in patterns of action and interaction between and among various types of social units (i.e., 'actors'). So they are not especially interested in creating theory about individual actors as such (unless perhaps they are psychologists or psychiatrists). (Strauss & Corbin, 1999, p. 81)

If grounded theory is about the social (interactive) then time will tell the extent to which grounded theory can help in the theoretical development of more purely psychological issues.

CONCLUSION

So important is grounded theory in the development of qualitative research methods that all serious researchers should be familiar with its basic ideas and procedures. Having said that, it is an approach which often seems poorly understood and full-blown examples, from psychology, of its use are hard to come by. In one sense, grounded theory ticks all of the boxes since it promises a theoretical analysis based on qualitative data without theory being reviewed as a prerequisite. This might seem to be a dream scenario to a student with a dissertation or project to write – or even the researcher who has a pile of interview transcripts but no real idea about analysing them. However, it should be clear that grounded theory is personally demanding for the researcher and abstract thinking abilities are at a premium if the analysis is to be anything but mundane.

An important question is whether the sorts of theory that can be derived from grounded theory meets the needs, intellectual or otherwise, of the researcher. Partly the problem lies in the typical sorts of data used in grounded theory studies rather than grounded theory itself. That is, it is difficult to move to a more abstract level from the common-sense explanations provided by participants in the research. Consequently, it is often the case that grounded theory studies generate categories to describe what is going on in the data but things are not taken much further than that. The formal theory promised by grounded theory materialises too infrequently because the range of data available in a study is too limited. Grounded theory needs a rather broader approach to the data available than a typical research study generates.

KEY POINTS

- Grounded theory basically involves a number of techniques which enable researchers to effectively analyse 'rich' (detailed) qualitative data effectively. However, quantitative research findings may also be involved.
- It reverses the classic hypothesis-testing approach to theory development (favoured by some quantitative researchers) by defining data collection as the primary stage and requiring that theory is closely linked to the entirety of the data.
- The researcher keeps close to the data when developing theoretical analyses in this way the analysis is 'grounded' in the data rather than being based on speculative theory which is then tested using hypotheses derived from the theory.
- Grounded theory does not mean that there are theoretical concepts just waiting in the data to be discovered. It means that the theory is anchored in the data.
- In grounded theory, categories are developed and refined by the researcher in order to analyse (usually textual) data. The analysis should maximise the fit of the developing theory (categories) to the data and any other relevant information source. Since the theory is closely tied to the data, many researchers using grounded theory do not consider previous theory relevant to developing the analysis.
- The theory which emerges in grounded theory research is often described as 'middle range' and is not intended to be far-reaching or to be an all-encompassing 'grand' theory. However, since theories are often based on common-sense ideas from participants they may not be particularly abstract or elaborately synthesised.
- Grounded theory is principally 'inductive' (that is, does not deduce outcomes from theoretical postulates). It is systematic in that an analysis of some sort will almost result from adopting the system. It is a continuous process of development of ideas it does not depend on a critical test of a hypotheses derived from the theory as is characteristic of mainstream psychological theory development which can be regarded as deductive.
- Comparison is the key process in grounded theory all elements of the research and the analysis are constantly compared and contrasted.
- Computer programs are available which help the researcher organise the materials for the analysis and effectively alter the codings and categories.

ADDITIONAL RESOURCES

Charmaz, K. (2008). Grounded theory. In J.A. Smith (Ed.), *Qualitative Psychology: A Practical Guide to Research Methods*, 2nd Edition. London: Sage, pp. 81-110.

Dick, B. (n.d.). Grounded Theory: A Thumbnail Sketch. http://www.scu.edu.au/schools/gcm/ar/arp/grounded.html (accessed 2 August 2009).

Hawker, S., and Kerr, C. (2007). Doing grounded theory. In E. Lyons & A. Coyle (Eds.), *Analysing Qualitative Data in Psychology*. London: Sage, pp. 87-97.

Henwood, K., and Pidgeon, N. (2003). Grounded theory in psychological research. In P.M. Camic, J.E. Rhodes & L. Yardley (Eds.), *Qualitative Research in Psychology: Expanding perspectives in methodology and design*. Washington, DC: American Psychological Association, pp. 131-156.

Payne, S. (2007). Grounded theory. In E. Lyons & A. Coyle (Eds.), *Analysing Qualitative Data in Psychology*. London: Sage, pp. 65-86.