

METHODOLOGY: COLLECTING DATA

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Introduction

This chapter covers:

- What is meant by the terms *methodology* and *method*, how they are related, and the distinctions between them;
- Why you need to have a discussion of methodology and method in your thesis, and what that discussion should cover;
- Models of knowing and knowledge, which are implicit in different methods or techniques for collecting data;
- Sampling for fieldwork, and the need to thoroughly understand one's sampling rationale;
- The importance of trying to collect 'rich' data;
- Ethical considerations;
- A short discussion on objectivity in post-positivist research.

Methodology

Methodology refers to a 'perspective' or broad theoretically informed approach to research, which stems from the researcher's epistemological stance or philosophical/political position. *Methodology is how researchers make their epistemology and theoretical stance work for them in their research.* (See Chapter One for more on epistemology.) You might, for example, decide that any research you do should be as participatory as possible (that is, should involve the research participants at every stage). You might decide to do action research with a group, whereby the group does research on a problem that it identifies, and in the process, tries to come up with a solution to the problem. By its nature, such a methodology is also participative.

The term methodology also refers to the overall *approach* that you use for your research.

There are three classical research approaches: the case study, the survey and the experiment. Briefly put:

1. A case study develops detailed, intensive knowledge about a single 'case' or a small number of related cases. The context is extremely important, and the object is to find out what kinds of things are happening, how and why they are happening and what they mean to the people involved, rather than to determine the frequency of pre-determined kinds of things the researcher believes can happen.
2. A survey collects information in standardised form from groups of people. Its aim is usually to identify patterns across large groups of people or organisations.
3. An experiment usually starts with a hypothesis and measures the effects of planned change in one variable on another variable, within a sample of people from known populations.

Case studies are very often the starting point for post-positivist research. Because they focus on a single case they are useful for examining levels of complexity that might otherwise be difficult to reveal. They are not confined to investigating/exploring individuals or groups, but can also examine events, organisations, types of behaviour or ways of knowing.

A large number of concepts and ways of making sense of the world, or of experience (discourses), are likely to emerge from any one person or case studied. Such phenomena can be simultaneously unique and general. In other words, discourses, frames of reference or mental models are common, but everybody has a unique relationship to them. Generalisability is present in any single case, that is, every individual is representative in some way of the social. However, generalisability does not have to be the goal of every case study.

Techniques or methods

A methodology may or may not specify its own particular *techniques* or *methods* for collecting data, such as:

- interviews;
- questionnaires;

- life histories;
- group discussions, focus groups;
- observation;
- analysis of texts, documents and existing statistics.

This chapter does not go into detail about these different approaches and techniques, since there are many excellent texts that cover the same ground (for example, Robson, 2003; McCracken, 1988; Holstein and Gubrium 1999; Flick, 1998; Mason, 1997, 2002). Instead, we have chosen to make key observations concerning choices you need to make during the thesis process.

Most of your choices will be guided by the nature of your research question or problem. Your whole thesis is a concentrated attempt to address a particular issue, and everything else in the thesis flows from the questions you are posing. So there is no point in deciding at the outset that you want to use interviews as a technique for collecting data. Until you have formulated your question, you do not know if interviews will be a suitable way of getting the information you require. On the other hand, to be completely pragmatic, you might decide to choose a question that does lend itself to interviews. Ideally, though, the question should come first, then the methodology.

Discussing methodology in your thesis

Your thesis should include a section or chapter (depending on the overall length of the thesis) on the research methodology. In PhD, MPhil or MLitt theses, there is often a separate chapter on methodology. In shorter Masters theses, you can have a section on methodology within one of the other chapters. For instance, it could be placed at the end of the introduction, or the end of the literature review (when your research question has been set out clearly), or at the beginning of the chapter where you set out your findings. In any kind of thesis, you also have the option of structuring the thesis in such a way that you do not include a discrete methodology chapter. Instead you weave in observations and discussions on methodology and method at appropriate points throughout the thesis. Your supervisor will advise on this.

When you are writing about methodology in the thesis, your purpose is to explain how and why your research approach and methods are the best you can use to address your particular questions, bearing in mind your epistemological and theoretical framework.

In the thesis introduction and in the literature review, you have an opportunity to state your fundamental beliefs about your chosen field of research. Now, in writing about methodology, you have the opportunity to explore how those beliefs impact on the research. This is where you discuss the links between your epistemology, or your philosophical stance on your topic, your personal and professional experience, and the methods, techniques and procedures you use. The methodology chapter or section/s should form a sort of 'hinge' between your literature review (which includes the establishment of your epistemological and theoretical stance, the refinement of your research questions, and the establishment of the significance of the research questions) and the findings/discussion sections.

Before you start collecting data for your research

If you decide to collect data from people, before you do so, you need to have already

- identified a research topic;
- formulated a research question and some related sub-questions;
- reviewed what others have to say about your topic and/or contextualised your topic;
- written at least some of your introduction and literature review.

You also need to take heed of some basic ethical issues. You need to consider any possible implications of your research for participants. You need their co-operation and have a duty to act in an ethical manner towards them.

To start, there are some basic guidelines for matters you should attend to before beginning your data collection (based on Chapter Three in Bell, 1999).

- If appropriate, clear official channels by getting formal permission to carry out your study, as soon as you have agreed on your approach with your supervisor;
- Speak to the people who will actually be asked to co-operate (as distinct from management who give permission);
- Decide what you mean by anonymity and confidentiality;
- Decide whether participants will receive a copy of the thesis;
- Inform participants what is to be done with the information they provide;
- Prepare a written outline of intentions and conditions under which the study will be carried out, to give to participants;

- Be honest about the purpose of the study;
- Remember that people who agree to help you are doing you a favour.

If you have any doubts about ethical issues, consult your supervisor.

Your epistemological stance as it relates to data-collection methods

The way you choose to collect data is illustrative of your beliefs about knowledge and human experience. Techniques or methods for collecting data are not simply neutral procedures, but carry assumptions that are inextricably related to the epistemological stance of the author. Franklin (1997) illustrates this point, in her consideration of different kinds of research interview: information extraction, shared understanding and discourse. You need to give some kind of consideration to your own assumptions about these issues, and include a discussion of them in the methodology section or chapter of your thesis.

In summary, the purpose of writing about methodology is:

- to explain your epistemological stance as it relates to data collection;
- to explain and justify how you approached the problem, issue, or research question(s) you have posed. You should justify the particular approach or strategy (case study, survey or experiment);
- to describe and give a rationale for your choice of specific methods/techniques used for collecting data (interviews, focus groups, questionnaires, documents, observation, etc or a combination of these);
- to outline the procedures you use for analysing and interpreting your data;
- to discuss anything you have learned about methodological issues, throughout the whole research process.

Models of data collection

In this section, we discuss three kinds of assumptions about knowledge and information, which can operate in different techniques for collecting data from people. These models are not intended as a comprehensive 'list' of ways to treat the collection of data, rather they serve to illustrate how methods for collecting data reveal the epistemology and the stance of the researcher (for more on epistemology, see Chapter One).

The models are:

1. Information extraction;
2. Shared understanding;
3. Discourse.

(adapted from Franklin, 1997)

Models one and two are quite prescriptive (although model two is less prescriptive than model one). Model three tends to have characteristics rather than prescriptions. Feminist approaches, narrative approaches, clinical case-study approaches, and biographical-interpretative methods (see Hollway and Jefferson, 2000: 30-34) also provide procedures for collecting data, which both share and take forward some of the characteristics of the shared-understanding and discourse models outlined below.

1. Information-extraction model

In this model, the researcher takes the active role of question-asker, and the person taking part in the research takes the passive role of respondent. The aim of such data-collection is to obtain comparable material from different interviewees in a form that lends itself readily to coding and to quantification. Most questionnaires and some kinds of interviews can be described as operating within an information-extraction model.

Prescriptions of the information-extraction model:

- standardised questions are put in a pre-determined order;
- if an interview is being conducted, the interviewer does not respond substantively to what the interviewee says, as this might 'bias' subsequent responses;
- interviewers should be friendly enough to facilitate information extraction, but no more;
- interviewers do not express their own views, even if they think this would lead a respondent to say more.

This 'traditional' (Hollway and Jefferson, 2000: 30) model assumes that ideas, feelings and knowledge reside in the person and come forth in the interview or through the questionnaire, with varying degrees of completeness and truthfulness. The success or otherwise of the data-gathering exercise depends in part on the 'openness' and 'articulateness' of the respondent, and in part on the skill of the researcher in creating good questions and questionnaire layout, getting the questionnaire to the respondent at the optimum time, or, in the case of an interview, in creating an appropriate environment.

When you might use this model

This model also assumes that human experience can be accessed via clarity of questions, combined with logic. Of course, it depends on what kind of experience you are trying to gain access to. It may be that you require very factual information, which can be extracted from a respondent. This model of interviewing is based in the positivist assumption that there exists a one-to-one correspondence between a question and its answer, or between a phenomenon and its cause (see Chapter One for more on positivism). If you simply want respondents to report on their experience of physical health, for instance, and grade it as good, bad or indifferent, then this approach will probably be adequate. But if you are looking for more information about how they view health and well-being, then you are unlikely to glean rich data from an approach such as this.

As we explained in Chapter One, the research questions for the thesis as a whole are inextricably linked with methods for collecting data. If the research questions are completely unambiguous and lend themselves to unambiguous answers, this model will suffice.

When you need to consider other models

The information-extraction model is useful when the data you require is extremely 'cut and dried', however it can carry serious moral implications. Oakley (1981) describes how she was employed on a research project, interviewing first-time mothers in this mode. The designers of the research assumed that the information they required about babies' behaviour was 'just the facts'. Having started, however, Oakley realised that she could not continue to avoid engaging with the interviewees, when they asked questions about caring for babies. They saw her as somebody who could provide information and reassurance. Not to give it would be an exercise in unequal power. She departed from the model she began with, and engaged with the women, responding to their queries and discussing their needs with them.

Sometimes, an interview or questionnaire can begin in information-extraction mode, with standard pre-formulated questions. It can then depart from the standardised questions and 'open up', giving the respondent opportunities to offer new lines of thought. Models two and three (below) offer more open ways to gather data.

2. The shared-understanding model of collecting data

This model developed in response to the criticisms levelled against the information-extraction model. The technique or method most widely used for this mode is the interview. Here, the interview is seen as a situation in which the interviewer attempts to gain understanding

of how the interviewee experiences aspects of her/his own life and/or the world of objects and other people, by actively engaging with the interviewee. The interview is construed as an interpersonal situation and it is recognised that the interviewer's characteristics, sensitivity and other qualities are likely to affect what is said. The presence and participation of the interviewer are not viewed negatively, as in the information-extraction model. The interview is a process during which meanings and insights are not only brought forth or uncovered, but also sometimes produced or generated.

Prescriptions of the shared-understanding model:

- the interview should be semi-structured, following a guide, rather than a predetermined set of questions; the interviewer is thus free to pursue lines of thinking introduced by the interviewee;
- the interviewer comes to the interview as open-minded as possible, aware of, but bracketing off, any pre-suppositions;
- the interviewer aims for clarification (by asking questions, providing tentative interpretations), but not at the risk of eradicating genuine ambiguity in the interviewee's view of what is being discussed;
- The interviewer paraphrases or interprets while the interview is in process, encouraging the interviewee's responses and corrections; where possible, the interviewer may arrange a follow-up interview to corroborate further interpretations.

The aim of this kind of interviewing is to obtain rich, nuanced, descriptive material that reflects the interviewee's understanding of her/his life-world (or part of it) and lends itself to qualitative analysis in one or more modes, for example, the identification and categorisation of central themes, or the extraction of core narratives.

A major theme of this kind of interviewing is the idea that the interviewer understands the interviewee from the interviewee's own perspective - 'the texture and feeling as well as the "facts"' (Franklin, 1997: 103). Nevertheless, when it comes to analysis, the model does not assume that the researcher cannot apply a theoretical framework that yields alternative understandings of the interviewee's experience.

Proponents of the information-extraction model and the shared-understanding model are extremely critical of each other. Moreover, proponents of the third model, the discourse approach, are critical of the shared-understanding model's liability to assume that the real

or true version of events or of human experience will emerge in response to a sympathetic interviewing style.

3. The discourse model of collecting data

This model conceptualises the collection of data as a process of ongoing interaction between two or more people carried out through the medium of language. Interviews and focus groups can both operate in this mode. It has some assumptions in common with the shared-understanding model, but some assumptions are not common, and the emphases are different.

It is assumed that both researcher and research participant have active roles. The researcher may shape the dialogue significantly. Assumptions that the researcher should be distanced (as in information-extraction model), or can bracket off her/his presuppositions (as in the shared-understanding model) are questioned. It is deemed productive for the researcher to draw on her/his own experience (although not to the extent of drowning out that of the participants). The distribution of power, established in part prior to the interview (by relative social or professional position, and so on) and in part during the interview, will affect what is said and how.

Most importantly, meaning and experience are considered to be *formed*, not merely expressed or reported, through the speaking that takes place in the interview or focus-group process.

Characteristics of the discourse model:

- The researcher enters into a conversational mode, and responds to interviewee's or group's questions, perhaps even talking about his/her own experience;
- While a topic or focus generally exists beforehand, exploration of new themes that arise in the exchange is encouraged;
- Cross-connections may develop: one participant may say something that can be used productively in subsequent interviews or focus groups;
- The researcher attends to and, if desired, re-arranges power relations between participants with the aim of establishing equality, or even a collaborative relationship, as in memory work (see Stephenson et al, 1996, for example). This kind of move is intended to eradicate the unequal relations between researcher and researched, which characterise the information-extraction model, and which tend to persist

(although not condoned and perhaps modified) in the information-extraction model.

The discourse model is similar to what Holstein and Gubrium (1997) call *active interviewing*. This is an interpretive practice between interviewer and interviewee, who use interpretive resources to co-construct meaning. An active interviewer 'intentionally provokes responses by indicating – even suggesting – narrative positions, resources, orientations and precedents' (Holstein and Gubrium, 1997: 123). The interviewer or focus-group moderator encourages participants to shift positions, so as to explore alternative perspectives, contradictions, and ambivalences. The idea of shifting positions shows how one person can hold many different ways of interpreting experience. This is clearly very different from the assumption in the information-extraction model that one factual interpretation of experience exists within one person.

Getting good quality data

Although you may be very clear about your overall research question and related sub-questions, gathering good quality data may not be a simple matter of putting that question and a series of related sub-questions to your participants. You may find that you gather a lot of data, but that it is not giving you the *kind* of 'rich' insights you seek.

What is rich information?

As we have already pointed out, in your thesis you are asking questions similar to those many people pose every day. The difference is that you are investigating the questions in a more detailed and systematic way. You need more detailed responses than you would normally get in day-to-day conversations. This kind of detail characterises rich or 'thick' (Geertz, 1973) data. Charmaz puts it like this:

Rich, detailed data give you explicit materials with which to work. ... Rich data afford views of human experience that etiquette, social conventions and inaccessibility hide or minimize in ordinary discourse. Hence, rich data reveal thoughts, feelings and actions as well as context and structure. ... Rich data afford the researcher a thorough knowledge of the empirical world or problem that he or she studies. (Charmaz, 1995: 33)

Getting to why and how

In post-positivist research, you are most likely to be asking *why* and *how* questions. But getting to why and how is not a simple matter of asking the respondents questions that begin with those words, such as, how does that make you feel, how does power operate,

why does something happen, how do you make sense of that? Hollway and Jefferson (2000: 26) point out that respondents:

- may not hear the question through the same meaning-frame as that of the researcher or other respondents;
- may need (either knowingly or unknowingly) to protect vulnerable aspects of themselves;
- may not know why they experience or feel things in the way that they do;
- the task of the researcher is to elicit information that illuminates why and/or how but without shutting down useful information by bluntly asking those questions. While how and why questions may seem to be clear and unambiguous, in fact they often serve to elicit closing-down answers.

Hollway and Jefferson (2000: 35-37) recommend:

- Using open questions, the more open the better. Avoid questions that elicit yes or no answers. So for instance, asking 'what do you most fear', while superficially an open question, nevertheless invites a narrow answer. On the other hand, saying, 'tell me about your experiences of fear' or 'tell me about a time when you were fearful' invites people to be open and expansive, and to make associations between different experiences;
- Eliciting stories, since the choice of story and the choices made by the story-teller within the story, are often revealing of how the story-teller sees life;
- Avoiding straightforward 'why' questions, because they invite intellectualisations or rationalisations of problems, and are often uninformative in terms of the research questions;
- Following up using respondents' ordering and phrasing;
- Recognising the value of free association (apparently illogical connections made by the interviewee or focus-group participant). This means that you don't curtail respondents too early. Allow people to speak and make their own connections without assuming that there is no connection to your question.

Following these recommendations is not always easy, even for experienced researchers. Many participants see the interview or focus group as an opportunity to intellectualise or to talk in theoretical or abstract terms about the issues. They may begin to tell stories, but then dismiss these as 'anecdotes' of little value. Positivism places little value on stories or narratives, and most of us are deeply (even if we are unaware of it) affected by positivist models of research, even when trying to conduct it in a post-positivist manner.

Don't assume that your respondents are not affected by positivism, even if they don't use that term. Many will assume that you want certain things from them, such as rational explanations and facts. Given the difficulty of escaping positivism, even for a researcher who has thought deeply about the issues, and faced in a focus group or interview situation with participants who are also embedded in positivism, it is very easy for a researcher to slip back into 'why' questions. Responses become abstract and the complexities of human experience may not emerge.

For example, one of us (Anne B. Ryan) was involved in collecting data for a study of the experiences of adult education practitioners, using focus-group discussions (see Ryan, McCormack and Ryan (2004)). The researchers involved were disappointed with the quality of much of the early data collected. We felt it did not illuminate the questions we were asking about how the tutors facilitated transformative learning in the classroom. On examining the transcripts to see where we could improve our approach and questions for subsequent groups, we concluded that we asked 'why' and similar questions on too many occasions, and did not ask for enough stories and critical incidents. The occasions when stories *were* allowed to develop in the focus groups produced some of the data that most illuminated our research questions.

More ethical issues that may arise when you are seeking rich data concerning human experience

Ethical practices in traditional positivist research followed medical models that centred on issues of informed consent and privacy. Information about the research was provided at the start, as a once-off happening (Richie and Rigano, 2001: 753ff). This is the usual approach when using the information-extraction model of data collection.

When data is collected in shared understanding and discourse models, ethical issues are more uncharted, and thus more potentially hazardous. The decision to consent 'cannot be reduced to a conscious, cognitive process, but is a continuing emotional awareness that characterises every interaction' (Hollway and Jefferson, 2000: 88). The traditional model assumes that a respondent is in a better position to judge whether they want to participate

prior to the interaction with the researcher, that is prior to the evidence on which trust is largely based (Hollway and Jefferson, 2000: 88). However, feelings can change as the research progresses and participants get better insight into what is involved.

In shared understanding and discourse models, participants may find themselves discussing issues they had not anticipated, or recalling experiences and making disclosures that upset them. While the first-time researcher might prefer to avoid this kind of situation, in itself it is not a bad thing if well handled. Keep in mind the distinction between distress experienced by a participant and harm done to them as a result of discussing difficult experiences (Hollway and Jefferson, 2000: 88). For example, if somebody recalls distressing past experiences and becomes upset, but as a result of the interview and the sympathetic relationship with the researcher decides to seek counseling or other therapeutic action, this is unlikely to cause harm to the individual and may actually be the beginning of an improved situation for her/him.

An Example

I (Anne B. Ryan) facilitated a debrief for researchers and participants, as part of an action-research study on overcoming barriers to leaving prostitution. One of the participants said that she had become very upset while discussing her experiences with the researcher, but went on to say that the researcher had encouraged her to seek counseling, which had helped her greatly. She further reported the relationship between the researcher and the respondent, and the engagement of the researcher with the issues, as well as her self-awareness were important factors in making this decision.

Hollway and Jefferson's discussion on this issue is highly recommended for researchers of sensitive topics.

Even if you don't anticipate beforehand that a topic will be sensitive, you cannot be certain that this will be the case. If the focus of the research shifts, as is likely to happen, researchers should inform participants. There may be a need to plan for periodic reaffirmations of consent with their participants. For example, oppressive relationships such as bullying or other kinds of abuse may emerge as part of the research data, and the researcher may need to decide how to deal with this. Should confidentiality be maintained, should the issues be exposed, or some other intervention made? While these kinds of ethical issues do not often arise at MA level, they *can* occur, and frequently do arise at PhD level. If in doubt about ethical issues consult your supervisor.

What do you end up with when you collect rich data?

You usually end up with pages of print (either transcripts of interviews or focus groups, or even written responses to open questions in questionnaires), which most researchers refer to as text. This has to be analysed in some way, which is the topic for the next chapter. Before ending this chapter, however, we offer two more points:

1. Data suitable for your purposes may already exist (see next section);
2. You need to consider carefully where you should go for data and how much of it you need, whether you are collecting it from people, or from existing documents or archives (see the section on sampling).

Using existing data

It is not always necessary to go into the field in order to collect primary data for your study. Data that can illuminate your research questions may exist in various libraries, collections or archives or in the form of publicly available documents. There is nothing to be gained by collecting data that gives information you could access without doing fieldwork.

For instance, an excellent thesis was produced by Flannelly (1999) on the topic of training and work for people with disabilities. She used as primary data faxes that had been exchanged between her and a student over a period in preceding years. Cameron (1999) also conducted an analysis of transcripts of pre-existing tapes about communication skills, produced by British Telecom.

In both of these cases, the researchers' questions could be approached or explored by means of documents that already existed. In social research, a document is anything we can read that tells us something about the social world. The category includes official reports, private and personal records such as letters, diaries and other papers, songs, speeches, radio programmes, buildings, statues, novels, public records, educational materials, visual documents (films, TV, photos, videos, websites and e-mails). Even if we do not literally read some documents, they are visual records that we interpret, and they can reveal some of the frames of reference of the people who produce them.

It may also be the case that another researcher has already carried out questionnaires, interviews or focus groups on your topic, and that you can get access to the transcripts of these via an archive.

Sampling

Wherever you go for the data that you eventually analyse in order to answer your research questions, you have to make decisions about why this is the right place to go, and how much data you need to collect.

Sampling is a crucial issue for researchers. You need to thoroughly understand your sampling strategy, and include a discussion of it in your methodology chapter or section. Mason (1997, Chapter Five) characterises sampling decisions as a core set of difficult questions for researchers, rather than a set of rules or procedures.

Issues of sampling are closely tied up with validity issues in research, because the most commonly understood (and therefore 'valid' in most eyes) form of research is the survey, which uses statistical sampling. Statistical sampling includes simple random sampling, using lottery, random tables, or computer selection. This kind of sampling is often called representative and is probably the most commonly recognised form of sampling logic, and the one most readily understood by the general public. If you think of any public discussion of research, on the radio or in the press, you will find that the size of the sample and the method of selecting respondents is used to comment on how useful the research is.

However, statistical samples are representative only in terms of the particular system used to classify the individuals or cases selected (Mason, 1997: 86). Statistical conventions are used to calculate the probability that patterns observed in the sample will exist in the wider population.

Representative sampling may not be the best way to find the sources of the information you need, in order to address your research questions:

- A representative sample may be very large, and data from it may therefore be superficial, ruling out the possibility of generating the kind of material required for an in-depth analysis;
- The parameters of a total population may not be known, and its key characteristics are not known quantities, therefore commonly used variables in representative sampling such as gender, age, class, may not be relevant.

Theoretical or purposive sampling

Many post-positivist research projects require a sampling logic that differs from representative sampling. The key difference relates to the role of the researcher. In *theoretical or*

purposive sampling the principle of selection relies on the researcher's judgement as to the typicality or interest of research participants or existing data. The processes of sampling, data generation, and data analysis are viewed interactively. The researcher initially goes to where the answers to research questions are most likely to be found.

After each stage of data collection, and following preliminary analysis, subsequent decisions about collection and location are made. A sample is built up, which enables the researcher to fulfil the needs of the research project. Once again, the overall research question is guiding the decisions made about sampling, which go on throughout the research process. This is very different from the logic of statistical sampling, where the entire sample is chosen beforehand, before any data emerges from the participants.

Potter and Wetherell, (1987: 161) point out that sometimes, if important patterns are not being recognised, it is necessary to conduct interviews across a wide sample. However, if one is interested in discursive forms, meaning frameworks, or concepts, then ten interviews might provide as much valid information as several hundred responses to a structured opinion poll.

For example, one of us (Anne B. Ryan) used purposive sampling to select respondents for contract research on couples' experiences of the first year of marriage (Ryan, 2002). The commissioning organisation (ACCORD) was interested in how women and men were making sense of the issues that arose for them during the first year of marriage, and how they negotiated these issues.

Anne writes:

The most difficult part of that piece of research was convincing officials making funding decisions at the Department of Social, Community and Family Affairs that theoretical sampling and in-depth discursive models of data collection were appropriate for the research purposes. The officials were firmly wedded to a positivist model of research, which led them to expect survey-style statistical sampling. This illustrates our point that representative sampling is the most widely understood kind of strategy among the general public. I was called to several meetings to explain why I did not propose to use this kind of sampling, and, latterly, to justify theoretical sampling. Eventually, to their credit, those with decision-making power did finally agree to fund the research as originally proposed. Tellingly, though, when it was finished, and even after ACCORD had expressed satisfaction with what that organisation learned from the research, the Department asked a well known survey researcher to comment on the validity of my research. Although he does not conduct this kind of research himself, he recognised

the value, reliability and validity of the findings. Indeed, when we met subsequently, he made almost exactly the point we make above: that if one is interested in the concepts and meaning-repertoires by which people make sense of the world, a half-dozen interviews could provide extremely rich data.

Variations on theoretical sampling

It is often useful to select one unit or case for detailed scrutiny, because you wish to treat in a detailed and rounded way the social processes that operate in a particular context. A number of classic studies have concentrated on a single text or event, in order to show how a particular effect is achieved (that is, how certain worldviews, concepts, discourses or ways of making sense have persuasive or explanatory power). It is also productive to examine in a detailed way one-off instances of what are unmistakably commonplace phenomena. Particular cases or groups of cases can be *paradigmatic exemplars* of significant categories.

You may also decide that certain units have a pivotal significance in your study, because they occur commonly, or infrequently, or because they demonstrate the phenomenon of your theoretical interest. Flick (1998: Chapter 7) summarises as follows:

- extreme case sampling: failures or successes can indicate something about the field as a whole;
- typical case sampling: chosen because the researcher's knowledge of the field indicates that they are typical;
- maximal variation sampling: an integrated study of a few cases which vary as much as possible;
- intensity sampling: chosen because they embody an intensity of interesting features;
- sensitive case sampling: politically important cases are chosen.

Flick also points out that sampling does not end with the collection of data. Researchers also make sampling decisions while interpreting their data (you cannot interpret every bit of the data you work with, so you have to have a clear rationale for choosing certain parts of it). Neither can you present every single finding in the final write-up, so you have to make choices here too.

When should data-collection stop? In theoretical sampling: *saturation* occurs when nothing new emerges any more from the data (see Strauss and Corbin, 1990 for details), and this is the point at which to stop. In practice, however, most student researchers at Master's level are constrained by time and this determines when they stop. For PhD theses, it can sometimes proceed endlessly. It is worth bearing in mind, however, that it is better to collect a small amount of good-quality data and subject it to rigorous analysis, than it is to collect too much and to analyse it poorly. We return to this issue in the chapter on analysis.

Remember too that many students/thesis writers spend too much time collecting data and not enough time analysing it. So make sure that if you need go into the field to seek primary data, you should do so in good time. You should balance the amount of time spent collecting with the time spent on analysis and interpretation. You will need at least three times the amount of time for analysis that you need for collection.

To sum up, then, the crucial determinants of sample size, of location, of methodology and method are:

- the specific research question (Potter and Wetherell, 1987: 161);
- thinking through one's theoretical priorities (Silverman, 2000: 110);
- locating samples that are rich in relevant information.

You need to understand your sampling strategy thoroughly. The principle of understanding the process rather than representing a population must be kept clearly in view when you are carrying out theoretical selection, and when you are explaining it to other people. The richness of relevant information available from the sample should be the deciding factor for choosing a particular respondent. Flick (1998), Mason (1997/ 2002) and Potter and Wetherell (1987) provide further important details about theoretical sampling.

Post-positivist research and objectivity

In collecting data, deciding where to go for it, and in analysing it, you are the research instrument. All the decisions, from the particular focus implied by your research question, through choice of methodology and method, sampling decisions, analysis and write-up, are filtered through your theoretical sensitivity. In other words you use your unique combination of personal and professional experience, and your reading of relevant literature in order to decide where to go for data.

Your function as the research instrument does not mean that you are not objective. Post-positivist research requires you to get up close but it also requires an ability to see the whole picture, to take a distanced view, or an overview. This kind of objectivity is different from 'just the facts', devoid of context, but it does not mean judging from nowhere (cf Eagleton, 2003: 135). It requires the ability to subject one's own assumptions to scrutiny. This in turn requires patience, honesty, courage, persistence, imagination, sympathy and self-discipline.

When methodology does not work as you expected

Whatever methodology you use, various parts of it may not work out. That is, it may not yield the quality of information you seek. This will affect the quality of any analysis you will be able to do. The GIGO (garbage in, garbage out) principle applies here. If you collect or use pre-existing poor-quality data, your analysis and findings will be necessarily limited.

You should always pilot any data-collection method you plan to use. In other words, try it out on a small scale before you do the 'real thing'. This will help you assess the quality of information your method is yielding. Even if piloting shows up deficiencies, however, you may not always know how to improve the quality of your collecting techniques. This is where your supervisor can be of great assistance. Make sure to consult in good time – before the piloting exercise and after it.

After all that, it still may not work out. You may realise too late that you would have been better taking a different approach; you may even conclude that you were asking the wrong questions right from the start. This is not a disaster. You can explain and discuss this in your thesis. Again, this is a case where your supervisor will be able to help.

When your thesis is almost complete, you should draft a discussion of the successes and limitations of your methodology. Don't be afraid to discuss something that did not work as well as you anticipated. By reflecting on why this might be so, you are improving the quality of your own learning and making that clear in the text of your thesis. Remember that one of the purposes of conducting research for a thesis is to learn about the research process itself. You need to show what you have learned, by writing it up as part of your methodology section (or as an additional sub-section concerning methodology, in your discussion chapter). Even if it turns out disastrously and yields little or no useful information, you can, depending on your subject's ethos, make this disaster the main focus of the second part of your thesis. Hollway and Jefferson (2000: 27-30) discuss their own attempts at data-production in this light, showing early attempts to gather material on fear of crime, which did not yield the kinds of detailed and rich information they were looking for.

A list of guiding questions to help draft a methodology section for your thesis:

1. What values underpin your research?
2. What is the purpose of the study? What are the focusing questions? Is the purpose of the research primarily theoretical, practical, or personal?
3. What overall term would you use to describe your research strategy: case study, survey, experiment, or combination?
4. Where does the study take place, and who are the participants and how were they selected? Describe the physical and social context and the salient characteristics of the main actors.
5. How would you describe your attitude to the questions you are asking: open, closed, exploratory, probing, and so on? ('Questions' refers to the big/overall research question and the actual questions you put to research participants.)
6. What kinds of information are you looking for (for example, qualitative, quantitative, or a combination)? How could the different kinds of information shed light on the research issue or problem?
7. What techniques are you using for collecting data? (Possibilities include observation and fieldnotes, taped interviews or focus groups with transcription, questionnaire, document analysis, or some combination.) Why have you chosen these particular techniques? Are they the most suitable for the purpose of the research and why? If they are not the most suitable, what limitations have led to you choosing the techniques you *are* using?
8. What ethical issues apply to your research?
9. How do the design or the research methods employed enhance the credibility (that is, the trustworthiness and believability) of the study?