3
GENERALISING FROM QUALITATIVE DATA

CHAPTER OVERVIEW

CHAPTER OBJECTIVES

By the end of this chapter, you will be able to:

- understand why inexperienced qualitative researchers worry about sample size
- see the place of purposive and theoretical sampling in qualitative research
- understand why deviant cases are important and when it is appropriate to change your sample during a study
- understand the logic of sampling social processes rather than individuals
- Most important of all, be able to answer the question: 'a case of what?'

A regular refrain I hear from student researchers is: 'I have so little data, only just one case, so how can I possibly generalise about it?'

Here are some examples of such questions from six students at workshops I ran recently:

- I believe five interviews are enough. How to justify my gut feeling?
- What is the minimum sample size accepted in qualitative research?
- My main anxiety is that I haven't got enough data.
- Given that my **ethnography** is based on only one case, how generalisable is it?
- I am currently looking into analysing 200 logs on Facebook. Will the numbers be sufficient for a PhD?
- How many case studies do I need?

Like many intelligent people beginning qualitative research, these students are terrified that their projects may be undercut by their use of a limited amount of data. They know that in quantitative research generalisations are normally based on statistical **sampling** procedures. Such sampling has two functions:

- It allows you to feel confident about the representativeness of your sample: 'if the population characteristics are known, the degree of representativeness of a sample can be checked' (Arber, 1993: 33).
- Representative samples allow you to make broader inferences: 'The purpose of sampling is usually to study a representative subsection of a precisely defined population in order to make inferences about the whole population' (Arber, 1993: 38).

These students realise that such sampling procedures are, however, usually unavailable in qualitative research. In such studies, our data are often derived from one or more cases and it is unlikely that these cases will have been selected on a random basis. Very often a setting will be chosen simply because it allows access. Moreover, even if you were able to construct a representative sample of cases, the sample size would be likely to be so large as to preclude the kind of **intensive analysis** usually preferred in qualitative research (Mason, 1996: 91).

This give rise to a problem, familiar to users of quantitative methods: 'How do we know … how representative case study findings are of all members of the population from which the case was selected?' (Bryman, 1988: 88).

Giampietro Gobo has neatly summed up these concerns:

> Even though qualitative methods are now recognized in the methodological literature, they are still regarded with skepticism by some methodologists, mainly those with statistical training. One reason for this skepticism concerns whether qualitative research results can be generalized, which is doubted not only because they are derived from only a few cases, but also because even where a larger number is studied these are generally selected without observing the rigorous criteria of statistical sampling theory. (2008: 193)

As a consequence, students doing qualitative research sometimes try to sample whole populations or, where this is impractical, try to construct random samples. Two student

examples are provided below. As you will see, rather than making your study more generalisable, adopting this kind of defensive posture can create further problems for the qualitative researcher.

METHODS IN ACTION

Using large or random samples

In one interview study of unqualified medical practitioners in Sri Lanka, one province district was selected and included 10 (out of 14) practitioners who gave their consent and 350 of their patients.

A second study of 'burnout' among Sri Lankan female primary school teachers used a sample of 15 teachers who were randomly selected from the participants of a much larger, quantitative, prevalence study.

Both studies, modelled on quantitative research design, create further difficulties:

- Can detailed qualitative methods of analysis be fully used if you do 350 interviews? Apart from anything else, will you have time to transcribe your data properly? Data gathering may be so time consuming that you have little time for data analysis.
- In the second example, do you really need a fully random selection of cases in order to do credible qualitative research? Should we reject a case just because it is the only one to which we have access even if it looks highly illuminating?

Ultimately, the question 'How many cases do I need?' depends upon your research problem and random sampling may be inappropriate (see Section 3.1).

TABLE 3.1 The problematic use of random or probability samples in social research

The difficulty of finding sampling frames (lists of population) for certain population sub-sets when these frames are often not available. The majority of studies on particular segments of the population cannot make use of population lists: consider studies on blue-collar workers, the unemployed, home-workers, artists, immigrants, housewives, pensioners, football supporters, members of political movements, charity workers, elderly people living alone, and so on.
The phenomenon of non-response: account must be taken of the gap (which varies according to the research project) between the *initial* sample (all the individuals about whom we want to collect information) and the *final* sample (the cases about which we have been able to obtain information); the two sets may correspond, but usually some of the subjects in the first sample are not surveyed.
Representativeness and generalisability are not two sides of the same coin: the former is a property of the *sample*, whilst the latter concerns the *findings* of research.

Source: adapted from Gobo (2008: 194)

So far, I have blithely assuming that we know what a 'case' is. You need to be able to answer the question 'a case of what?' Answers are found in Section 3.3.

How can we escape this defensive posture with its unintended side effects? As these student examples show, the first thing to realise is that the logic of random sampling may not work in qualitative research or may simply be inappropriate. Second, as Table 3.1 demonstrates, even in quantitative studies, random sampling is not without its own problems.

EXPLORE ONLINE

For a recent discussion of problems with random sampling plus some solutions, go to David Morgan's comments at:

www.methodspace.com/forums/topic/two-problems-with-random-sampling-and-two-alternatives

However, asserting a negative is not itself a solution. Showing that random sampling has its problems may make us feel good but it does not, by itself, offer a solution to the problem of generalising from case studies.

For a few writers who see qualitative research as purely descriptive, generalisability is not an issue. For example, Stake (1994: 236) refers to the '*intrinsic case study*' where 'this case is of interest … in all its particularity and ordinariness'. In the intrinsic case study, according to Stake, no attempt is made to generalise beyond the single case or even to build **theories**.

This is resisted by many qualitative researchers. As Mason puts it:

> I do not think qualitative researchers should be satisfied with producing explanations which are idiosyncratic or particular to the limited empirical parameters of their study... Qualitative research should [therefore] produce explanations which are generalizable in some way, or which have a wider resonance. (1996: 6)

So, unlike Stake, the problem of 'representativeness' is a perennial worry of many qualitative or case study researchers. How do they attempt to address it? Can we generalise from cases to populations without following a purely statistical logic?

PRACTISE YOUR SKILLS

If you are currently planning a study, work out a logic for your choice of the number of cases you plan to study. Alternatively, review any qualitative study with which you are familiar. What is the logic used to select cases? Are you convinced by it?

Two alternatives to random sampling are commonly used by qualitative researchers:

- purposive sampling
- theoretical sampling.

3.1 Purposive sampling

Before we can contemplate comparing our case with others, we need to have selected our case. Are there any grounds other than convenience or accessibility to guide us in this selection?

Purposive sampling allows us to choose a case because it illustrates some feature or process in which we are interested. However, this does not provide a simple approval for any case we happen to choose. Rather, purposive sampling demands that we think critically about the parameters of the population we are interested in and choose our sample case carefully on this basis. As Denzin and Lincoln put it: 'Many qualitative researchers employ … purposive, and not random, sampling methods. They seek out groups, settings and individuals where … the processes being studied are most likely to occur' (2006: 202).

METHODS IN ACTION

Sampling in an interview study

Purposive sampling provides a good basis to find respondents in an interview or focus group study. For example, a PhD study of work/family balance focused on professionals in high-commitment occupations where confrontations between care and career might be expected to be accentuated. The study recruited a sample of 43 semi-structured, in-depth interviews with female (26) and male (17), white, heterosexual, lawyers (29) and consultants/managers (14) in the process of establishing different work/life adaptations. Informants were recruited formally through firms, and informally through different (non-related) social networks. (Selma, Sociology, Norway)

This example shows that you can select your interviewees purposively based on the groups which your research problem addresses. In addition, as in Selma's case, it can be helpful to use a 'snowball sample', using the social networks of one or two initial informants. In an MSc study of the experience of international students at a UK university, Maddie Sandall used email addresses to contact people. She then asked her respondents if they could persuade any of their friends to come along for interview.

Purposive sampling also has a role where you are studying organisations or social processes rather than individuals. Stake (1994: 243) gives the example of a study of interactive displays in children's museums. He assumes that you only have resources to study four such museums. How should you proceed? He suggests setting up a typology which would establish a matrix of museum types, as in Table 3.2.

The typology set out in Table 3.2 yields six cases which could be increased further by, say, distinguishing between museums located in small and big cities – bringing up the cases to 12. Which cases should you select?

You will be constrained by two main factors. First, there may not be examples to fit every cell. Second, not many students will have the resources to allow them to research

every existing unit. So you have to make a practical decision. For instance, if you can cover only two cases, do you choose two participatory museums in different locations or in different subjects? Or do you compare such a museum with a more conventional exhibit-based museum?

Provided you have thought through the options, it is unlikely that your selection will be criticised. Moreover, as we see below, how you set up your typology and make your choice should be grounded in the theoretical apparatus you are using. Sampling in qualitative research is neither statistical nor purely personal: it is, or should be, theoretically grounded.

TABLE 3.2 A typology of children's museums

	Type of museum		
Programme type	**Art**	**Science**	**History**
Exhibitory	1	2	3
Participative	4	5	6

Source: adapted from Stake (1994: 243)

EXPLORE ONLINE

Seawright and Gerring (2008) provide a useful discussion of purposive sampling in political science research. Go to:

http://prq.sagepub.com/content/61/2/294.full.pdf+html

PRACTISE YOUR SKILLS

Imagine that you have the resources to study *four* cases of the phenomenon in which you are interested. Following my discussion of Stake (Table 3.2), draw up a typology to indicate the universe of cases potentially available. This typology should include between six and 12 possible cases.

Now explain why you propose to select your four cases in terms of the logic of purposive sampling.

3.2 Theoretical sampling

Theoretical and purposive sampling are often treated as synonyms. Indeed, the only difference between the two procedures applies when the 'purpose' behind 'purposive' sampling is not theoretically defined.

Bryman argues that qualitative research follows a theoretical, rather than a statistical, logic: 'the issue should be couched in terms of the generalizability of cases to *theoretical* propositions rather than to *populations* or universes' (1988: 90, my emphasis).

The nature of this link between sampling and theory is set out by Mason:

> theoretical sampling means selecting groups or categories to study on the basis of their relevance to your research questions, your theoretical position ... and most importantly the explanation or account which you are developing. Theoretical sampling is concerned with constructing a sample ... which is meaningful theoretically, because it builds in certain characteristics or criteria which help to develop and test your theory and explanation. (1996: 93–4)

In qualitative research, our choice of cases should always be theoretically guided. This means that our selection of cases is not based on statistical grounds but derived from a particular theory which we seek to test. As Robert Yin argues:

> case studies, like experiments, are generalizable to theoretical propositions and not to populations or universes. In this sense, the case study, like the experiment, does not represent a 'sample', and, *in doing a case study, your goal will be to expand and generalize theories (analytic generalization) and not to enumerate frequencies (statistical generalization)*. (2009: 15, my emphasis)

Take my study of HIV-test counselling (Silverman, 1997). Although I tried to include counselling centres from different countries and with a varying mix of professional expertise, I was not trying to count how many counsellors or clients engaged in particular activities. My study was based on the theoretical tradition of **conversation analysis (CA)**. This meant that my sample was designed to test previous CA-based generalisations about professional–client communication. Giampietro Gobo (2008: 204) calls this kind of theoretically based reasoning *deductive inference*.

Theoretical sampling has four features, which I discuss below:

- choosing cases in terms of your theory
- choosing 'deviant' cases
- changing the size of your sample during the research
- sampling social relations not individuals.

3 2 1 Choosing cases in terms of your theory

Mason (1996: 85) writes about 'the wider universe of social explanations in relation to which you have constructed your research questions'. This theoretically defined universe 'will make some sampling choices more sensible and meaningful than others'. Mason describes choosing a kind of sample which can represent a wider population. Here we select a sample of particular 'processes, types, categories or examples which are relevant to or appear within the wider universe' (1996: 92). Mason suggests that examples of these would include single units such as 'an organization, a location, a document ... [or] a conversation'.

Mason gives the example of studying gender relations as discourses which construct subjects of gender relations. In this approach, as she puts it, 'you are ... unlikely to

perceive the social world in terms of a large set of gender relations from which you can simply draw a representative sample of people by gender' (1996: 85).

So in qualitative research the relevant or 'sampleable' units are often seen as theoretically defined. This means that it is inappropriate to sample populations by such attributes as 'gender', 'ethnicity' or even age because how such attributes are routinely defined is itself the *topic* of your research. On the other hand, as Flyvbjerg (2004: 392–4) notes, your choice of theory can help you to identify *critical* cases.

As an example of theoretically defined sampling, Bryman uses Glaser and Strauss's discussion of 'awareness contexts' in relation to dying in hospital:

> **The issue of whether the particular hospital studied is 'typical' is not the critical issue; what is important is whether the experiences of dying patients are typical of the broad class of phenomena ... to which the theory refers. Subsequent research would then focus on the validity of the proposition in other milieux (e.g. doctors' surgeries). (Bryman, 1988: 91)**

As Bryman suggests, a 'class of phenomena' always should be theoretically defined. In the same way, a 'deviant' case is recognisable because it fails to fit a theoretically defined pattern.

3.2.2 Choosing 'deviant' cases

As I argue in Chapter 4, the scientific method involves subjecting any hypothesis to critical scrutiny. Rather than trying to prove that something holds, we must do our best to disprove it and only accept propositions for which no negative evidence has been found.

This means that it is important that you overcome any tendency to select a case which is likely to support your argument. Instead, it makes sense to seek out negative instances as defined by the theory with which you are working. 'One rationale for a single case is when it represents the *critical case* in testing a well-formulated theory' (Yin, 2009: 47). This allows us to make generalisations similar to statistical inferences but without employing probability criteria.

For instance, in a study of the forces that may make trade unions undemocratic, Lipset et al. (1962) deliberately chose to study an American printing union. Because this union had unusually strong democratic institutions it constituted a vital deviant case compared with most American unions of the period. Lipset et al.'s union was also deviant in terms of a highly respected theory which postulated an irresistible tendency towards 'oligarchy' in all formal organisations.

So Lipset et al. chose a deviant case because it offered a crucial test of a theory. As our understanding of social processes improves, we are increasingly able to choose cases on such theoretical grounds.

Say we are interested in schools with children from immigrant backgrounds. Then, Gobo suggests:

> We can choose two elementary schools where, from press reports, previous studies, interviews or personal experiences, we know we can find two extreme situations: in the first school there are severe difficulties of integration between natives and immigrants, while in the second there are virtually none. We can also pick three schools: the first with severe integration difficulties; the second with average difficulties; and the third with rare ones... If, in these optimal conditions, the consequences foreseen by the theory do not ensue, it is extremely unlikely that the theory will work in all those empirical cases where those requirements are more weakly present. Hence the theory is falsified, and its inadequacy can be legitimately generalized... Moreover, the legitimacy of the generalization (of the scant explanatory capacity of the theory just falsified) depends not only on the cogency of the rhetorical argument but also on the strength of the connections established between theory and observations. (2008: 204–5)

The following case study shows a similar sampling method in a study of urban poverty.

METHODS IN ACTION

Inner-city poverty

William Julius Wilson proposed a theory of the social transformation of the inner city, which included a number of key **hypotheses** on the effects of living in highly concentrated poverty areas (Wilson, 1987). One of these hypotheses states that individuals living in extreme poverty areas are much less likely to be tied into the job information network than those living in marginal poverty areas. This hypothesis could be tested by a participant observer who selects one neighbourhood that represents an extreme poverty area and another that represents a marginal poverty area and observes patterns of work-related interactions in each neighbourhood over an extended period (Wilson and Chaddha, 2009: 559).

DAVID'S TOP TIPS

Being on the look out for deviant cases reflects **abductive reasoning**, which seeks to draw inferences or clues from unexpected facts (see Chapter 1 and Charmaz, 2014: 200–3).

3.2.3 Changing the size of your sample during the research

So far we have been discussing theoretical sampling as an issue at the *start* of a research study. However, we can also apply such sampling *during* a piece of research. Indeed, one of the strengths of qualitative research design is that it often allows for far greater (theoretically informed) flexibility than in most quantitative research designs. As Mason puts it: 'Theoretical or purposive sampling is a set of procedures where the researcher manipulates their analysis, theory, and sampling activities *interactively* during the research process, to a much greater extent than in statistical sampling' (1996: 100).

Such flexibility may be appropriate in the following cases:

- As new factors emerge you may want to increase your sample in order to say more about them.
- You may want to focus on a small part of your sample in early stages, using the wider sample for later tests of emerging generalisations.
- Unexpected generalisations in the course of data analysis lead you to seek out new deviant cases.
- You discover that additional data do not add to or change a finding from your existing data so the information you collect just repeats itself (*data saturation*).

Alasuutari has described this process through using the analogy of an hour-glass: 'a narrow case-analysis is broadened … through the search for contrary and parallel cases, into an example of a broader entity. Thus the research process advances, in its final stages, towards a discussion of broader entities. We end up on the bottom of the hourglass' (1995: 156).

METHODS IN ACTION

Urban pubs

Alasuutari illustrates his 'hour-glass' metaphor through his own study of the social consequences of Finnish urbanisation in the 1970s. He chose local pubs as a site to observe these effects and eventually focused upon male 'regulars'. This led to a second study even more narrowly focused on a group where drinking was heavier and where many of the men were divorced. As he puts it: 'Ethnographic research of this kind is not so much generalization as extrapolation … the results are related to broader entities' (Alasuutari, 1995: 155).

How samples emerge in qualitative studies is summarised in Table 3.3.

TABLE 3.3 The emergent character of qualitative samples

Sampling in qualitative studies is typically emergent, meaning that strategies and goals are subject to change based on ongoing reflections, data analysis and tentative hypotheses that are formed in the course of study.
Sampling is typically conducted 'serially', meaning that choices about sampling are based on information collected by previous observations.
Qualitative sampling is rarely predetermined or finite in its numerical size, as qualitative researchers often do not know when a study will be 'theoretically saturated', or when further data collection will stop yielding new theoretical insights.

Source: Abrams (2010: 539)

METHODS IN ACTION

Juvenile prisons

Laura Abrams (2010) carried out a longitudinal qualitative study of juvenile correctional institutions informed by social work perspectives. This four-year study sought to understand the culture of correctional residential treatment institutions, youths' responses to treatment messages and correctional practices within these facilities, and their community re-entry process. This is how she describes her sampling strategy:

> To select the study sites, I started with one facility, and then chose the next two facilities both strategically and sequentially. In regard to 'strategic' considerations, the settings were intentionally varied in order to challenge and refine evolving conclusions and theories. As such, the three institutions selected were distinct based on size, type of offender served, length of stay, and therapeutic programming and philosophy. I also considered practical and logistical matters such as travel time, willingness of the institution's supervisors to participate in the project, and the feasibility of approval by the counties and courts governing the institutions. Thus, a blend of theoretical and practical considerations drove the selection of study sites. (p. 544)
>
> The sampling strategy used to select the study sites can best be described as purposive, with some theoretical consideration involved. This is because researcher judgment drove the selection of sites that were considered optimal to observe and investigate the phenomenon of interest. The selection of sites was also theoretically based in that we selected the institutions based on the observations and analyses conducted during the course of the study... Moreover, the selection of settings was accomplished in an emergent manner that fits with the general goals of developing theory and concepts inductively, testing assumptions with repeated observations, and leaving room for flexibility and reflexivity in the research process. (pp. 545–6)

DAVID'S TOP TIPS

In quantitative research, you must always stick to what your research protocol lays down about the selection of your sample population. By contrast, good qualitative research often involves discovering new relevant samples during the course of your research. This implies that qualitative researchers who rigidly stick to a predefined case may not be using their initial data analysis to the best effect.

3.2.4 Sampling social relations not individuals

Quantitative surveys usually sample individuals. While this remains the case in psychologically oriented qualitative interview studies, qualitative research is often more concerned with social processes and situations rather than the characteristics of individuals. This means that our research design is quite different. As Clive Seale puts it:

> many textbooks assume that when one is going to do a research study one always wants to sample 'people' (rather than, say, documents). Students should realise that all kinds of phenomena can be studied for social research purposes (e.g. building design, music lyrics, web sites, small ads). (Personal correspondence)

Giampietro Gobo underlines Seale's point:

> The [qualitative] researcher should focus his/her investigation on interactive units (such as social relationships, encounters, organizations), not only because social processes are more easily detectable and observable, but also because these units allow more direct and deeper analysis of the characteristics observed. (2008: 203–4)

As Yin argues:

> The main point ... is that you should try to aim towards analytic generalization in doing case studies, and you should avoid thinking in such confusing terms as 'the sample of cases' or the 'small sample of cases', as if a single-case study were like a single respondent in a survey or a single subject in an experiment. (2009: 39)

DAVID'S TOP TIPS

Don't feel defensive if you are doing an ethnography of only one setting. If you provide fine detail of a social process you have discovered within that setting, you can reflect on its possible relevance to research on other settings. Lincoln and Guba (1985) refer to this as the transferability of findings

METHODS IN ACTION

Charge–rebuttal sequences

In the 1980s, I was studying communication between patients, parents and doctors in British paediatric clinics, observing and tape-recording what happened (Silverman, 1987). Like many qualitative researchers I worked inductively, generating hypotheses from my observations. In one clinic which treated young people with diabetes, I had noticed that the doctor asked his young patients whether they wanted accompanying parents to be present during the consultation.

In the case that follows, June had asked to be seen alone. While June was having blood taken by a nurse in another room, we heard a knock on the doctor's door, followed by June's mother putting her head only round the open door, laughing and calling herself 'the neurotic mother' and then asking to see the doctor.

I was immediately interested in how June's mother had 'framed' herself. This seemed to characterise her presence as 'going behind her daughter's back' (remember June had asked

to be seen alone) and providing a pre-emptive strike against her being described as 'neurotic' precisely by making the charge against herself.

After June's mother enters, this is what is said:

Extract 3.1

1 M: She's going through a very languid stage ( )
2 she won't do anything unless you push her
3 D: so you're finding you're having to push her quite a lot
4 M: mm no well I don't (.) I just leave her now

In Extract 3.1, I noticed how M changes her account after D's question at line 3. D has changed the subject from June (as in lines 1–2) to M herself. Notice also the 'defensive' tone of M's answer in line 4. It is as if M has heard D's question as making a charge against herself and offers a rebuttal in line 4. Underlying all this seemed to be two incompatible parenting norms shared by both parents and doctors involved with young diabetics:

- It is the responsibility of parents to monitor their child's treatment of their illness.
- Despite this, parents of 'young adults' must respect the right of their children to make their own decisions.

Later on in this consultation, we see the same process repeating itself:

Extract 3.2

1 M: I don't think she's really sticking to her diet (.)
2 I don't know the effects this will have on her (.) it's bound
3 to alter her sugar if she's not got the right insulin isn't it?
4 I mean I know what she eats at home but [outside
5 D: [so there's no real consistency to her
6 diet? It's sort [of
7 M: [no well I keep it as consistent as I can at home

Notice, once again, that what begins as M's concern about her child becomes refocused after D's question (lines 5–6) as an issue of M's parenting. In both extracts, as well as in M's self-description as she puts her head around the door, M's comments imply that a charge is present and she offers a rebuttal.

From these data, I defined a candidate 'analytic generalisation' about charge–rebuttal sequences in such clinics. My task was then to look at other consultations to see if and how such sequences appeared.

Processes like charge–rebuttal sequences are what Gobo calls 'interactive units' and illustrate the way in which qualitative researchers sample social relations and not individuals.

DAVID'S TOP TIPS

Quantitative researchers often seek generalisations about *facts*; for example, how many people in a particular city live below the poverty line? In qualitative research, we are often more interested in generalising about *processes*. Small gives a relevant example of a classic qualitative study:

> When Geertz (1973) wrote on the cockfights in a small Balinese village, many expected his theoretical model (of how games can embody societal power relations) to be applicable to other sites, but few expected the empirical findings to be so applicable – that is, for cockfights to look similar or to follow the same rules in other villages throughout or outside of Indonesia. The latter would be wholly beside the point. (2009: 9)

PRACTISE YOUR SKILLS

Either use your own research or a published study to argue for choosing cases as examples of social processes rather than samples of individuals. Describe the nature of these processes.

3.3 What is a 'case'?

The preceding discussion suggests that we need to think critically about what counts as a 'case'. In quantitative studies, cases are often *individuals*. This means that in order to generalise about the prevalence of some phenomenon (e.g. particular types of personality) we need to randomly sample a population of individuals. By contrast, in business schools, qualitative research is redefined as case study research with whole organisations treated as 'cases'. However, this confuses 'the site [and] the phenomenon' (Czarniawska, 2013: 22). So when doctoral business students proudly say 'Amazon is my case', she asks:

> 'A case of what?' in what I hope is not an unfriendly way. They look at me disconcerted. (2013: 22)

In her terminology, qualitative research is the study of social processes. If we are studying an organisation, we use it to study a particular process. The organisation simply affords us a 'window' through which we can observe this process (Czarniawska, 2013: 23). As she explains:

> if cases are sites, what should be done if one site presents an opportunity to study several different phenomena ... or when a phenomenon occurs in several sites at once? (2013: 23)

Since we are studying social processes, our focus will be on interactive units (e.g. charge–rebuttal sequences). Moreover, because qualitative research is often inductive, we cannot

predetermine an appropriate sample until we have identified some candidate phenomenon. As a consequence, we decide on what is an appropriate sample as the research proceeds, sampling further until we find no deviant cases (this is what **grounded theory** calls data saturation).

As the preceding discussion shows, in qualitative research we do not usually talk about concrete sample **frames** (either individuals or organisations). Instead, we usually attempt to make 'analytic generalisations' about social processes.

DAVID'S TOP TIPS

Student worries about the numbers in their study usually arise because of confusion about the aims of qualitative research. In such research, our topic is not usually individuals or organisations but social processes. To identify and analyse a social process, often very few data are necessary.

3.4 Misunderstandings about case studies

As I noted at the start of this chapter, many beginning researchers can be quite defensive about their choice of cases to study and this can lead them to adopt quasi-quantitative methods which may be inappropriate to case study research. Bent Flyvbjerg (2004) has suggested that such defensiveness arises from a number of misunderstandings about the logic of case study research. Five of these misunderstandings are set out in Table 3.4.

TABLE 3.4 Five misunderstandings about case study research

Note: all these assumptions are false
General, theoretical (context-independent) knowledge is more valuable than concrete, practical (context-dependent) knowledge.
One cannot generalise on the basis of an individual case; therefore, the case study cannot contribute to scientific development.
The case study is most useful for generating hypotheses in the first stage of a total research process, while other methods are more suitable for hypotheses testing and theory building.
The case study contains a bias towards verification, that is, a tendency to confirm the researcher's preconceived notions.
It is often difficult to summarise and develop general propositions and theories on the basis of specific case studies.

Source: Flyvbjerg (2004: 421)

Why does Flyvbjerg argue that these five points are misunderstandings? Let us take each point in turn:

1. It is a mistake to assume that the further we move away from a specific case, the more valid is our knowledge. Such a view overlooks a key advantage of qualitative research – its ability to give us insight into local practices. As Flyvbjerg puts it:

   > For researchers, the closeness of the case study to real-life situations ... is important for the development of a nuanced view of reality, including the view that human behavior cannot be meaningfully understood as simply the rule-governed acts found at the lowest levels of the learning process, and in much theory. Second, cases are important for researchers' own learning processes in developing the skills needed to do good research. (2004: 422)

2. We should not overvalue formal generalisations. Single cases are crucial in attempting to *refute* initial hypotheses. This is the strength of **deviant-case analysis**. As Flyvbjerg reminds us, Popper's suggestion is that the observation of a single black swan is sufficient to falsify the generalisation that all swans are white. As a consequence:

   > falsification is one of the most rigorous tests to which a scientific proposition can be subjected: if just one observation does not fit with the proposition it is considered not valid generally and must therefore be either revised or rejected... The case study is well suited for identifying 'black swans' because of its in-depth approach: what appears to be 'white' often turns out on closer examination to be 'black'. (2004: 424)

   > This is because: the typical or average case is often not the richest in information. Atypical or extreme cases often reveal more information because they activate more actors and more basic mechanisms in the situation studied ... random samples emphasizing representativeness will seldom be able to produce this kind of insight. (2004: 425)

3. The case study is not limited to initial fieldwork but can be used to *test* hypotheses. As Flyvbjerg puts it:

   > 'The case study is useful for both generating and testing of hypotheses' (2004: 426).

   For instance, in my study of HIV-test counselling, I tested the hypothesis that the format which counsellors used to deliver advice was associated with clients' uptake of that advice (Silverman, 1997).

4. Preconceptions enter into quantitative studies when one seeks to establish **operational definitions** of some phenomenon at any early stage of the research. By contrast:

   > The case study contains no greater bias toward verification of the researcher's preconceived notions than other methods of inquiry. On the contrary, experience indicates that the case study contains a greater bias toward falsification of preconceived notions than toward verification. (Flyvbjerg, 2004: 429)

5. We should not worry that case studies are often reported by a complex narrative:

   > Good narratives typically approach the complexities and contradictions of real life. Accordingly, such narratives may be difficult or impossible to summarize into neat scientific formulae, general propositions, and theories ... To the case-study researcher, however, a particularly 'thick' and hard-to-summarize

> narrative is not a problem. Rather, it is often a sign that the study has uncovered a particularly rich problematic. (2004: 430)

DAVID'S TOP TIPS

Flyvbjerg's arguments should make you less defensive about using a case-study approach. Apart from the excellent points that he makes, it is worth noting that, as Gobo (2004: 442) suggests, many of the most important, theoretically productive qualitative research studies were based on single cases.

Giampietro Gobo has noted two further arguments which offer more support to Flyvbjerg's position. First, many of the statistical tests that are commonly used in quantitative research do not tell you how strong a relationship found in your sample is in the wider population. In that sense, generalisation is a problem for quantitative researchers (Gobo, 2004: 451). Second, some phenomena are likely to be more pervasive than others. For instance, if you are interested in a native grammar, one informant will be quite adequate (2004: 445).

3.5 Conclusions

Table 3.5 offers a summary of my arguments in this section. Taken from a freely available report by the US National Science Foundation, I hope it gives you added confidence to work with small samples.

TABLE 3.5 Generalising from small samples

• Small Samples Can Sometimes Yield Big Insights
• If the cases are appropriately chosen with regard to theoretical factors and compared, they can yield unique insights by revealing regularities between categories of cases that may escape large sample studies ... by thoroughly examining a small number of cases, the researcher may explore in-depth the contextual dimensions that influence a social phenomenon. Attention to such environmental and situational factors is often downplayed in larger-scale studies that often favour linear analysis and flatten out variegated social patterns even though they may be characteristic of social processes.
• Systematic Sampling Can Still be Scientific, Even if it is Not Random
Sampling procedures need to be evaluated according to the purpose of the project. Snowball sampling allows the researcher to enter into networks of individuals and identify respondents that they might not otherwise be able to identify. When performing referrals or any other type of targeted sampling, it is essential to ensure that the sample contains enough variation along key demographic and theoretical dimensions to draw conclusions beyond the particular individuals studied.

(Continued)

TABLE 3.5 (Continued)

• Generalisability to Population and Broader Contexts and Processes
Although larger-scale qualitative projects may endeavour to generalise to large populations such as nation states or entire ethnic groups, many more seek to inform us about smaller groups or patterns of interaction that can have great significance for our understanding of social processes. Good proposals articulate clearly that the data gathered are meaningful beyond the particular cases, individuals, or sites studied and specify precisely why they are significant, to whom, and to which institutions and processes the findings can be generalised. These can range from subpopulations (i.e. particular minority groups) to types of interactions (i.e. criminal proceedings) to sets of institutions (i.e. admissions committees of elite universities).

Source: Lamont and White (2005: 11–12)

I have shown that random sampling is not the only way to test the **validity** of our propositions. Theoretical sampling, sometimes based upon deviant-case analysis and always using the constant comparative method, offers powerful tools through which to overcome the danger of purely 'anecdotal' quantitative research. This kind of theoretical inference is set out in Table 3.6.

TABLE 3.6 How to generalise in qualitative research

In qualitative research, we cannot assemble random samples of cases. Instead, we seek to generalise through three kinds of 'theoretical inference':
• *Deductive inference*: choosing a critical or deviant case which can be used to test the validity of an accredited or standard theory.
• *Comparative inference*: identifying cases within extreme situations as well as certain characteristics, or cases within a wide range of situations in order to maximise variation; that is, to have all the possible situations in order to capture the heterogeneity of a population. This criterion is used to make generalisations similar to statistical inferences, but without employing probability criteria.
• *The emblematic case*: the typical or emblematic case, e.g. single case studies which embody one or more key aspects of social action or social process in particular organisations.

Source: adapted from Gobo (2009: 206)

DAVID'S TOP TIPS

Try not to be defensive if your data are limited to one or two 'cases'. Instead, seek to understand the logic behind such an approach and work out what you can gain by intensive analysis of limited but rich data.

WHAT YOU LEARNED

- Generalisation in qualitative research is based upon identifying recurrent social processes rather than sampling individuals.
- This means that identifying deviant cases is important and the understanding of theoretically defined social processes often indicates that you need to change your sample during a study.
- In qualitative research, 'cases' need not be defined as concrete individuals or settings but interactive units or processes.

TEST YOURSELF

1. On what basis are you selecting the cases you study?
2. What are they 'cases' of (e.g. individuals, organisations or social processes)?
3. What is the logic of purposive sampling?
4. What is the logic of theoretical sampling?
5. In what way(s) can we generalise in qualitative research?
6. How would you defend your research against a critic who said your selection of cases did not allow generalisations to be made?

EXPAND YOUR KNOWLEDGE

Using examples from a number of studies, the following article shows how we can make generalisations in qualitative research:

Payne, G. and Williams, M. (2005) 'Generalization in qualitative research', *Sociology*, 39 (2): 295–314.

For a paper on purposive and theoretical sampling, see:

Seawright, J. and Gerring, J. (2008) 'Case selection techniques in case study research: a menu of qualitative and quantitative options', *Political Research Quarterly*, 61 (2): 294–308

The following article shows how a sample was gathered during four research studies. It is particularly useful for revealing the practical issues involved in recruiting people to study:

Thomas, M., Bloor, M. and Frankland, J. (2007) 'The process of sample recruitment: an ethnostatistical perspective', *Qualitative Research*, 7 (4): 429–46

We are usually concerned about the number of cases in our study because we want to generalise from our findings. In the following paper, the author discusses three ways in which we can generalise in case study research:

Halkier, B. (2011) 'Methodological practicalities in analytical generalization', *Qualitative Inquiry*, 17 (9): 787–97

This classic paper by Bent Flyvbjerg explains the rationale behind the case-study method in qualitative research:

Flyvbjerg, B. (2006) 'Five misunderstandings about case-study research', *Qualitative Inquiry*, 12 (2): 219–45

Flyvbjerg's arguments are further examined in the following paper:

Ruddin, L. (2006) 'You can generalize stupid! Social scientists, Bent Flyvbjerg, and case study methodology', *Qualitative Inquiry*, 12 (4): 797–812

A must read for students worried about the number of interviews they need can be found at:

Small, M. (2009) '"How many cases do I need?" On science and the logic of case selection in field-based research', *Ethnography*, 10 (1): 5–38.

An excellent book-length treatment of the issues discussed in this chapter, is:

Seale, C. (1999) *The Quality of Qualitative Research*. London: Sage.

For useful chapters on case studies, see:

Emerson, R.M. (2004) 'Working with "key incidents"', in C. Seale, G. Gobo, J. Gubrium and D. Silverman (eds), *Qualitative Research Practice*. London: Sage, pp. 427–42.

Flyvbjerg, B. (2004) 'Five misunderstandings about case-study research', in C. Seale, G. Gobo, J. Gubrium and D. Silverman. (eds), *Qualitative Research Practice*. London: Sage, pp. 390–404.

Gobo, G. (2004) 'Sampling, representativeness and generalizability', in C. Seale , G. Gobo, J. Gubrium and D. Silverman. (eds), *Qualitative Research Practice*. London: Sage, pp. 405–26.

Another useful source is:

Gobo. G. (2009) 'Re-conceptualizing generalization: old issues in a new frame', in P. Alasuutari, L. Bickman and J. Brannen (eds), *The Sage Handbook of Social Research Methods*. London: Sage, pp. 193–213.

For a chapter-length treatment of theoretical sampling, see:

Charmaz, K. (2014) *Theoretical sampling, Sahiration, and sorting', in Constructing Grounded Theory: A Practical Guide through Qualitative Analysis*, second edition. London: Sage, pp. 192–224.

Other useful discussions can be found in the chapters:

Mason, J. (2018) 'Sampling and selecting in qualitative research', in *Qualitative Researching*, third edition. London: Sage, pp. 53–82.

Becker, H. (1998) 'Sampling', in *Tricks of the Trade: How to Think about Your Research while Doing it*. Chicago: The University of Chicago Press, pp. 67–108.

A good account of the conventional qualitative method's position on generalisability can be found in:

Stake, R. (2000) 'Case studies', in N. Denzin and Y. Lincoln (eds), *Handbook of Qualitative Research*, second edition. London: Sage, pp. 236–47.

A more advanced treatment is:

Peräkylä, A. (2016) 'Validity in qualitative research', in D. Silverman (ed.), *Qualitative Research*, fourth edition. London: Sage, 413–28.