

# Qualitative research: An overview and general issues

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Enquiry into service users' opinions has been denoted as an important area to examine because these individuals can play a significant role in shaping services, making a valuable contribution through their feedback. Qualitative research can be used to examine people's responses to treatment and services. It places a value on studying human experience and on providing an interpretation of an issue within a specific context. It is inductive in that it starts with details of a setting or situation, and then moves to a more general picture of the phenomenon being investigated.

## **Collecting qualitative data**

Qualitative data can be generated by asking about things (through interviews and focus groups), or by seeing things firsthand (through observations).<sup>1</sup> Researchers may use only one of these methods in a project, or they may use a combination, for example observing a hospital setting and interviewing people who work there.

Qualitative interviews – This form of data collection may be semi-structured or unstructured. For the former, researchers will draw up, in advance, a series of topics that they want to ask about in the interview (the interview schedule). They will follow areas of interest brought up by the participant, whilst having at the back of their mind the overall research purpose and topics from their schedule, and the need to steer the conversation to relate to these.

Unsurprisingly, unstructured interviews are less pre-shaped than semi-structured ones. In such an interview, the researcher may have a broad topic that they wish to discuss, but will not generate any questions in advance. For example, the researcher may wish to investigate the attitudes of parents towards caring for a child with cystic fibrosis. The interviewer may start off by asking 'Tell me what it is like to care for your child on a day to day basis,' and will then pose additional questions to ensure that the conversation flows and addresses the main research topic. However, they will not have planned these follow-up questions in advance. Instead, these will stem from responses given by participants. (N.B. Interviews can be one to one, or may include a pair of individuals, like parents, carer and service user, teacher and child).

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<sup>1</sup> There are other means of gathering qualitative data, such as reading documents and getting people to write their thoughts in a diary, but interviews, focus groups and observations are the main approaches to data collection that you will read in health and social care research.

In semi-structured and unstructured interviews, researchers will use prompts (or probes). For example, when a participant touches on a potential issue of relevance to the research topic that needs expanding, the interviewer may say something like 'Can you tell me a bit more about that?' Another technique to encourage interviewees to recount their stories is echoing, whereby the researcher takes the last statement from an interviewee and turns it into a question: 'So you are saying that...').

Semi-structured and unstructured interviews allow people to express their views more freely than in a structured questionnaire, but there is always the danger of interviewees getting sidetracked and talking about issues of little or no relevance to the area being investigated. Therefore, researchers need to be experienced in shaping the interview process to obtain the information they require. Interviews are generally recorded (using audio tapes or digital equipment) and transcribed (with participants' consent). When planning an interview-based study it is important to bear in mind that a one hour interview can take approximately six hours for a simple transcription (longer if pauses, intonations and overlapping of speech are noted in the transcript).

In qualitative studies, the relationship between interviewer and interviewee is considered as part of the research process. Data are produced during interaction between these parties; hence, data are the product of a specific context (time and place). How researchers present themselves may influence how the interview progresses. To monitor this, some investigators keep a reflexive diary, noting how they think an interview may progress and preconceptions about an interview prior to it taking place, and then views following an interview about this process.

Focus groups – This form of data collection usually involves approximately 6-10 people who are invited to come together to discuss a particular topic (oversampling by 1 or 2 people can be helpful because it is unlikely that everyone due to attend will actually make the group session). The value of a focus group is the interactive element of such an approach, which enables participants to bounce ideas off one another. For a focus group to proceed well, it needs a good facilitator (e.g. the researcher), to ensure that the conversation centres on the research topic, that no one dominates the discussion, and that no one is left out. It can be helpful to have a co-facilitator, who makes written notes (even if the session is recorded) and who gives a summary of what is said to the group at the end, which enables investigators to check that key issues have not been misunderstood or overlooked. Focus groups can be useful when people have a common experience. However, in healthcare, researchers often collect sensitive information that may not be easy to present in a group. Yet some people may feel empowered speaking in the presence of others who have been through a similar situation.

Observation – What people say and do are not necessarily the same. This is one reason for using observation, during which a researcher (or team of researchers) enter the situation relating to their study to view directly what happens. Whilst there, they will make notes (usually written) of events.

Observation may be covert, whereby the researcher does not let people being watched know that they are doing this. For example, a researcher may enter a mental health day centre and pretend to be a client if the question they wanted to address was ‘how do people with mental health problems interact within a day centre environment?’ The plus side of a covert observation is that it enables researchers to see things in a natural manner, without changes in behaviour occurring because of their presence. However, such an approach is ethically questionable because those being observed are unaware that this is the case. Consequently, a covert observational study will probably be hard to get through the rigorous standards set by ethics committees. In overt observations, researchers are honest about their interest in the situation and setting, and gain consent to watch what occurs.



Researchers using observation (covert or overt) as a data collection tool may be participant observers, whereby they engage in the activities of those being observed, and try to become part of the group (for example, they may carry out tasks set for those attending parenting classes, if their research question was ‘how do mothers and fathers differ in parenting classes?’). Alternatively, a researcher may take up the role of non-participant, whereby they remain detached from the situation being observed (for example, a non-participant observer may sit and watch a social worker making assessments of people with mental health problems, if the question was ‘how do social workers carry out a risk assessment for men and women with a mental health problem?’).

### **Sampling in qualitative research**

In qualitative research, a non-probability sample is generally employed, which does not strive to create a randomly selected group, but aims to identify “people who either possess characteristics or live in circumstances relevant to the social phenomenon being studied” (Mays and Pope, 1996: 12). Within this, two major sampling approaches have been linked to qualitative research: purposive and theoretical.

Researchers using a *purposive sample* choose participants or a setting to be involved in studies that expose salient features or categories pertinent to their research question. If the researcher feels that certain characteristics or settings are likely to impact on data collected, they may ensure that a range of these characteristics are included in the sample (e.g. age, gender, class, etc.).

Ritchie, Lewis and Elam (2003) talk about a number of different forms of purposive sampling, including:

- *Homogenous samples* – selection of individuals or units of investigation (e.g. classes, clinics) with similar characteristics.
- *Heterogeneous samples* – selection of individuals or units that are widely divergent, to classify themes that



cut across a range of cases (also referred to as *maximum variation*).

- *Extreme case samples (or deviant)* – selection of individuals that are unusual or special, allowing researchers to identify issues relating to the topic being investigated by examining exceptions.
- *Typical case samples* – selection of individuals that typically represent the issue being explored, i.e. ‘average’ cases.
- *Critical case samples* – selection of individuals that highlight a phenomenon because they are central to its production or delivery.

In addition, researchers may adopt an approach called *snowballing*, whereby they attempt to source additional information-rich sources through existing cases. For example, they may ask people they have already interviewed or key informants to suggest other people or places to involve in the study (Hansen, 2006).

*Theoretical sampling* has strong associations with grounded theory (see below) and relates to the selection of individuals or units to a sample based on the contribution they can make to a developing theory. It involves an iterative approach between data collection, sample selection and analysis. For example, researchers may carry out some initial interviews and then reflect on who else needs to be included in the study to develop further their analysis and to ensure that they search for negative cases as well as confirmatory evidence (Ritchie, Lewis and Elam, 2003). Researchers using grounded theory may initially take an unstructured sampling approach, whilst they try to orientate themselves and develop analytical insights, after which sampling may become more purposive, with specific individuals or units of study sought to increase the opportunity for undertaking constant comparison in the analysis (see below).

Samples in qualitative research tend to be small. For example, the number of individual interviews conducted will usually be less than 50 and number of focus groups will usually not be more than 14 (Ritchie, Lewis and Elam, 2003). In part, this is because the aim of this form of study is not to estimate the prevalence of a phenomenon but to provide an in-depth understanding of a topic, to develop explanations and to generate ideas or theories. In addition, qualitative research is data dense, which means that to be able to explore information in sufficient detail it is important to use a sample size that prevents the researcher from becoming swamped by data (but that allows for adequate depth of understanding). Sample size in qualitative research is often determined by saturation, “the point of diminishing return where increasing the sample size no longer contributes to new evidence” (Ritchie, Lewis and Elam, 2003: 83). For a more detailed introduction to sampling in qualitative research, see Marshall (1996).

### **Analysing qualitative data**

There are a number of approaches to qualitative research and analysis. However, Grbich (2007) talks about most qualitative analysis involving two key stages:

## 1. *Preliminary data analysis*

This is described as an ongoing process, whereby the researcher tracks the data as it is being produced and keeps an eye out for what needs to be followed up. Grbich describes it as the stage of being engaged with the data (rather than looking for explanations and interpretations), whereby the researcher aims to gain a deeper understanding of the topic.

## 2. *Post data collection analysis*

This is said to involve the reduction of data and development of major analytical themes. At this point the researcher will have a relatively clear idea of the issues being raised, following the preliminary analysis. This is where thematic analysis commences.

Particular approaches to qualitative analysis include the following:

*Conversation Analysis* – Researchers from this perspective do not simply regard talk as a medium of communication, but as social interaction. As suggested by Drew (2003: 141), “when we study conversation, we are studying not language idling, but language employed in the service of doing things in the social world.” It explores how people manage social activities through conversation. Cameron (2001: 87) referred to conversation analysis as “data-centred”, only dealing with what occurs in talk and, consequently, unconcerned with factors external to material being analysed. Conversation analysts assume a technician-like approach, examining detailed transcripts that indicate pacing, intonation, emphasis and overlap within dialogue. These transcripts will, generally, be of naturally occurring discourse (i.e. not produced specifically for the purposes of research), such as conversations between friends, a medical consultation or events in a courtroom.

*Discourse Analysis* – Traditionally, language has been regarded as a static entity, composed of component parts, produced by a communicator and decoded by a listener or reader. In contrast, discourse analysts reject the notion of language as an unambiguous series of signs, arguing that it is engaged, actively, in meaning-making (Wetherell, 2001). Discourse analysts “argue that when people state a belief or express an opinion, they are taking part in a conversation which has a purpose and in which all participants have a stake. In other words, in order to make sense of what people say, we need to take into account the social context within which they speak” (Willig, 2003: 161). It moves beyond understanding the content of data towards understanding its active aim. This form of analysis examines how specific discourses are formed, such as religious or medical (Silverman, 2000).

*Framework Analysis* – Developed by social policy researchers, framework is particularly useful when considering practice related questions. It is a relatively straightforward and structured means of organising data, divided into five stages (Ritchie, Spencer and O’Connor, 2003):

- 1) Familiarisation with data (becoming thoroughly immersed in the material collected).
- 2) Developing a thematic framework (identifying key issues from data).
- 3) Indexing data (labelling key issues that emerge across a set of data).
- 4) Devising a series of thematic charts (allowing the full pattern across a set of data to be explored and reviewed).
- 5) Mapping and interpreting data (looking for associations, providing explanations, highlighting key characteristics and ideas).

*Grounded Theory* – Ideally, from this perspective, the researcher starts off a study without any preconceived ideas; ideas are generated through data collection and analysis. Data analysis centres on constant comparison (although this process is also commonly used in other qualitative approaches). *Constant comparison* involves comparing elements of fractured data to seek out similarities and differences and to develop more conceptual codes. These codes are constantly revised to check that theory being built accounts for all data. Concepts are used to draw fragments back together into categories. Drawing categories together to tell a story that examines a social process is key to grounded theory. As a theory is emerging there will be cases that do not fit, known as *deviant cases*. It is important for researchers to look for these because they have to account for them in their emerging theory. A lot has been written about the process of grounded theory, giving detailed descriptions about how to carry out such work. For example, Charmaz (2006) provides a clear overview.

*Interpretative Phenomenological Analysis* – “The aim of interpretative phenomenological analysis (IPA) is to explore in detail how participants make sense of their personal and social world, and the main currency for an IPA study is the meanings, particular experiences, events, states hold for participants...At the same time, IPA also emphasises that the research exercise is a dynamic process with an active role for the researcher...” (Smith and Osborn, 2003: 51). IPA rests on the notion that access to the participant’s world cannot be direct, but is mediated via the researcher who comes to a study with their own ideas, understandings, preconceptions and background.

Finally, a word about CAQDAS (Computer Assisted Qualitative Data Analysis Software). The amount of data generated during a qualitative study can make computer programmes helpful in organising material. These programmes (e.g. Atlas-Ti, NVivo) record how data have been coded, allowing the researcher to search for similarities and differences and pertinent quotes. However, they do not carry out the analysis; the researcher still has to think about and code the data.



### **Assessing qualitative research**

Principles (such as those outlined below) rather than specific procedures are said to drive assessments of the quality of qualitative research (see, Miles and Huberman (1994) for further details of proposed criteria):

- *Objectivity/confirmability* – Not claiming that one can be completely objective, but describing clearly the methods and procedures used in a study, such as how data were produced and analysed.
- *Reliability/dependability* – Focuses on how the researcher went about conducting the study and how this may have affected the results. Using two separate raters to review extracts and to discuss and agree on themes is one means of meeting this criterion. So is the use of an *audit trail*, whereby the researcher is transparent about decisions made during a study (e.g. through keeping a journal). Information should be recorded about thought processes and choices made in terms of, for example, sampling, analysis and how categories were developed.
- *Internal validity/credibility/authenticity* – The level of detail about the context of the data, which relates to so-called *thick description* (i.e. the description provided should be detailed enough to allow others to understand the context of the research). It is important that findings are coherent, that negative evidence is sought and accounted for in analysis. *Respondent validation*, whereby participants are provided with results to check whether the analysis reflects their own experience, may also be included in this criterion. However, asking participants to comment on the analysis can be difficult because they will probably be unable to assess fully all data and may just reflect on their own perspective. In addition, there is the issue of how to respond should a participant come back and say they do not like the story they told and wish to change it.
- *External validity/transferability/fittingness* – Relates to sampling and assessing whether the sample is similar to other settings to which the research could be applied.
- *Utilisation/application* – How can the knowledge be used? Are areas for further research identified? What particular insights into the subject of study have been raised?

There are no set guidelines for the conditions under which results from a qualitative study can be generalised. However, one can think about (Lewis and Ritchie, 2003):

- ⇒ Representational generalisation – Would the results from the sample (e.g. views and experiences) be similar to those found in the population? Representational generalisation is not based on statistics and it is not about the prevalence of particular views or experiences, but it is about mapping a range of views or experiences. It is based on the quality of the research in capturing and interpreting the phenomenon and how far the sample contains diversity and constituencies present in the population sampled.
- ⇒ Inferential generalisation – Can you make modest speculations about the applicability of findings to other situations? This calls for *thick description*, which as suggested above means that sufficient information is provided relating to observations or commentaries and

environments in which data collection occurs. This then allows others to assess the transferability of a study's findings.

⇒ Theoretical generalisation – Since data for qualitative research are generally drawn from a single setting, qualitative investigators often talk about theoretical (or analytic) generalisation (i.e. considering the generalisability of cases to theoretical propositions rather than populations). Murphy and colleagues (1998) described this approach to generalisation by citing a qualitative project by Glaser and Strauss in which these two authors developed a theory that the greater the social loss of a dying patient, the better the care they receive. Murphy and colleagues noted that this theory could then be tested out for its generalisability in other settings. Hence, theoretical generalisation relates to how far results contribute to theory. “The degree to which the data from a study support existing theories can be assessed, by comparing how well different cases ‘fit’ within an established theory and how far it is able to explain behaviour in individual cases” (Lewis and Ritchie, 2003: 267).

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