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DATA COLLECTION

When browsing qualitative research literature it seems that almost anything that holds human experience can be used as data, whether texts such as interview transcripts, documents, diaries, letters, and notes taken during focus groups or visuals such as video-recordings, photographs, drawings and paintings. When we use already existing sources that have not been solicited by the researcher, we simply take the information as provided in the documents, and may include reflection on its quality. However, when we attempt to collect new data for our research projects, the demands of systematic and valid data collection are imperative. And although some of our data collection methods resemble daily activities, such as conversations or taking part in an event, researchers need skills and experience to produce good quality data. During analysis you are dependent on your data to make sense of your research subject, so quality of the data is imperative.

LEARNING AIMS

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

- Expand on the meaning of the word 'data' in qualitative research
- Understand the essence of the data collection methods most often used in qualitative research
- Reflect on strengths and weaknesses of different data collection methods
- Choose an appropriate data collection method in a specific research situation
- Develop a topic list and know how to use it
- Discuss the different uses of methodological, observational and theoretical memos
- Write memos
- List several advantages of video and audio recording during data collection
- Control the transcription of raw data in terms of content and anonymity
- Store data in the best possible way and prepare the data for analysis in a specific project

Data

In qualitative research, there are many ways in which data may be collected. Researchers can use verbal material from daily life, such as chat-sessions and advertisements. Social scientists can also request organizations or individuals to make their correspondence such as letters, minutes, e-mails and records available for study. In addition to these unsolicited sources, researchers may specifically ask participants to produce material, for instance to keep a diary, write a paper, take photographs or make a video. It can also be decided to conduct interviews or focus groups and invite people to participate in them. Likewise, researchers can request permission to observe and take part in the daily lives of the people they study. Which method is preferred depends on the research questions and the project's purposes – what the researcher wants to know and why – and the practical possibilities and limitations.

The above-mentioned activities result in data. Considered as empirical data are stories told by participants, quotes, observations by the researcher, photographs, case descriptions and so on (Sandelowski & Barroso, 2002a). Data are necessary in empirical research to give evidence or justification for everything you present later on as your findings, such as descriptions, new ideas, relationships between subjects, interpretations and explanations. The stance taken in this book is that qualitative data reflect people's experiences of daily life and that by studying these data social scientists are able to understand aspects of the social world.

However, qualitative data are not exact representations of life experiences. There are two reasons for this. First of all, solicited qualitative data are the result of an interaction between the participant and the researcher in one way or another. In the interaction the full picture may not be revealed, for instance participants leave things out, they omit certain actions and sometimes present themselves in a way they wish to be perceived. In other words, data are produced in a specific context with a specific aim, and this will colour them in some way.

A second reason that data are not similar to the experience itself is that data depend on the participants' ability to reflectively distinguish aspects of their own thoughts, ideas, observations and experiences and to effectively communicate what they perceive through language (Polkinghorne, 2005). Telling someone about an excellent dinner party at a friend's house is not the same as that person actually tasting the delicious food and enjoying the company. In other words, people do not know everything about themselves, they do not want to share everything, and they are not capable of putting everything into words. With these limitations in mind, we use mainly textual data in our qualitative inquiries.

This chapter concentrates on solicited data that are produced and collected by researchers within the scope of their research. Many research activities that apply to interview transcriptions, such as data management and data analysis, can be used for other materials as well, though they are not necessarily suited for visual data.

Qualitative data collection

In the following section, various data collection methods are discussed. It is not, however, a complete overview of everything you always wanted to know about data collection in qualitative research. Here we deal with data collection methods, because you need to know what is demanded of data that are appropriate for a qualitative analysis. In each of the following sections several publications are mentioned for further reading. The four methods that will be discussed are: participant observation, qualitative interviewing, focus groups and the production of visual material.

Participant observation

A definition of participant observation is:

The process in which an investigator establishes and sustains a many-sided and relatively long-term relationship with a human association in its natural setting for the purpose of developing a scientific understanding of that association. (Lofland & Lofland, 1995: 18)

Participant observation is a classical research strategy in both cultural anthropology and sociology. It is an approach to research which takes place in everyday situations rather than in laboratory conditions. This is why the method is also known as 'field work'. Direct observation of the people under study is enabled by the researcher taking part in the participant's everyday life (Lofland & Lofland, 1995; Spradley, 1980; Schatzman & Strauss, 1973). Where participation was at first viewed as a means to observe, nowadays participation is considered essential in detecting meanings, feelings and experiences.

Participant observation is just one method of conducting qualitative research: to describe what happens, who or what are involved, when and where things happen, how they occur, and why things happen as they do from the point of view of the participants (Jorgensen, 1989). Although participant observation is useful for studying almost every aspect of human existence pertaining to human meanings and interactions from the insiders' perspective, such as organizational life, family relationships, rituals, changes and continuities, and social-cultural rules of conduct, it is particularly useful when (Jorgensen, 1989):

- little is known about the phenomenon
- views of insiders and outsiders are opposed or stereotyped
- the phenomenon is somehow hidden from the view of outsiders.

Horowitz (1995) chose participant observation as a method to examine a social welfare programme for teenage mothers (see Box 1.5). The three reasons mentioned above

for choosing participant observation all seem to apply to her study. There was a scarcity of knowledge on teenage mothers from the perspective of the mothers themselves. Outsiders' views of teenage pregnancies were rather stereotyped in terms of education and race of the girls involved. An insider may be able to recognize that the girls could be responsible mothers too. The phenomenon of teenage mothers is not fully known as many girls may remain within their own family environment or relocate to a shelter where they remain unseen.

Participant observation is an umbrella term that covers several methods and techniques. The researcher observes people's activities, accompanies participants, takes part in their activities, reads documents, provides aid or does small jobs, and interviews participants (Delamont, 2004). The method is challenging for researchers as it taxes their social skills as well as their memories. A researcher continually selects, is insider and outsider at the same time, joins and observes, participates and takes notes. The researcher in effect has to become an accurate measuring instrument.

What is it that participant observers discern? Three elements can be distinguished (Spradley, 1980):

- *What people do*: cultural behaviour such as events and interactions.
- *What people know*: cultural knowledge and opinions.
- *What people create and use*: cultural artefacts such as art objects, clothing, buildings and tools, as well as symbolic marks.

Even when the field and the exact location of the research have been chosen, researchers will still have to determine what, where and how much of each of the various elements they will want to observe. Not everything can be observed. Sometimes researchers decide to be where the action is during their field work. Horowitz (1995), when working on the teenage mother programme, focussed on classes, staff meetings concerning the goals of the programme, and excursions with the participants. A possible pitfall of this tactic is that only unusual or extreme incidents are observed, while the mundane and taken-for-granted world is usually just as interesting.

Every field worker has to log observations and take notes (Lofland & Lofland, 1995; Schatzman & Strauss, 1973). Facts that can be directly obtained through the senses (How many people are present? What is the colour of their clothing? What language do they speak?) are easier to agree upon with others than experiential aspects (What is the atmosphere like? Were they having a misunderstanding? Did she react disappointedly?). The literature provides a lot of clues for the making of field notes, for example (Spradley, 1980):

- identification: who says what
- write everything down literally
- take concrete notes, not abstract ones (not 'then the lecturer intervened', but rather 'then the lecturer took the chalk and wrote on the blackboard that everyone should be quiet').

There is a continuum to be sketched with regard to the balance between participation and observation in the researcher's role. One could be more of a participant or more

of an observer, and anything in between. Which roles researchers adopt depend on what they want to learn about the field and on what the field has to offer (Hammersley & Atkinson, 2007). The success of the role taken depends on the researcher being accepted by the people in the field. Relevant questions are whether the people under study are willing to share their experiences with the researcher, and whether the researcher can put himself or herself in their place. Horowitz (1995) wondered if she would be accepted by the mainly-black staff and teenage mothers, and if she, being an elderly woman of Jewish descent, would identify with both groups.

How researchers should behave in the field and what a solid research relationship entails is bound to the ethical standards that we touched upon in Chapter 3. Overt performance and honesty about the intentions towards the researched is preferable to covert action. Field workers get their data by being admitted to the situation they want to study and, once there, in persuading people to let them stay. Many settings have a gatekeeper who imposes rules on those who want to study there. Gatekeepers, like school principals, nursing home directors or social workers in a teenage mother programme, know how the target population thinks, behaves and, importantly, how to live according to the rules. Therefore they have the power to help researchers understand and establish relationships within the research population. They also have the power to negotiate conditions that are acceptable to those they serve (Sieber, 1992).

Gaining entrance and building and maintaining trust with participants is one of the key issues in participant observation. But so is leaving the field. Simply stated, it is time to leave when the studied area has become uneventful, when theoretical saturation is attained (see Chapter 6) and when researchers feel confident about their knowledge of the subject (Snow, 1980). Leaving the field means that relationships are ended entirely, or at least become less intense, and this might be felt as a loss of grown friendships by the researcher as well as by the researched. It also means that researchers have completed data collection and are now faced with the challenge of writing the definitive version of their understanding of the people they studied. The ending of relationships on the one hand and the writing on the other hand can give rise to researcher's doubts, including some of the ethical issues mentioned at the end of the previous chapter, namely: Is harm prevented and is my message credible?

The qualitative interview

In interviews the researcher is the main instrument, just as in participant observation. There is extensive literature available on the topic of interviewing (for example, Kvale, 2008; Seidman, 2006; Rubin & Rubin, 2004; Gubrium & Holstein, 2002; Weiss, 1994; McCracken, 1988). A definition of an interview is:

... a form of conversation in which one person – the interviewer – restricts oneself to posing questions concerning behaviours, ideas, attitudes, and experiences with regard to social phenomena, to one or more others – the participants or interviewees – who mainly limit themselves to providing answers to these questions. (Maso, 1987: 63)

As is clear from the definition, a qualitative interview takes place in a reciprocal relationship. Interviews provide an opportunity for researchers to learn about social life through the perspective, experience and language of those living it. Participants are given the opportunity to share their story, pass on their knowledge, and provide their own perspective on a range of topics (Hesse-Biber & Leavy, 2006). A conversation, any conversation, is made easier when both conversational partners get along. This is referred to as 'rapport' in qualitative terminology, and holds that both partners have a genuine interest in the asking, answering and listening during an interview. Rapport is sometimes confused with liking each other, but it is possible to establish rapport and seriously work on the interview without liking or sympathizing with each other.

Interviews can be distinguished from one another by their predetermined structure. The more the interview is planned beforehand, the more the interviewer determines the direction of the interview. Alternatively, the more open the interview is, the more the interviewee can determine the contents and flow. A preliminary structure determines:

- which questions will be posed
- the formulation of the questions posed
- the sequence in which questions will be posed
- the answering options for the participants.

Since qualitative researchers are often looking for a true understanding of what is happening, the interviews are usually not entirely pre-structured with respect to content, formulation, sequence and answers. Neither are they left entirely open. Rather, thorough preparation results in a list of topics and/or questions to be asked at some point in the interview (see 'Instruments used' in this chapter). This type of interview is known as a 'semi-structured' or 'half-structured' interview. When the four components are at least in part dependent on the course and situation of each individual interview, we refer to it as an 'open' or 'qualitative' interview (Weiss, 1994). The different types of interviews are shown in Figure 4.1.

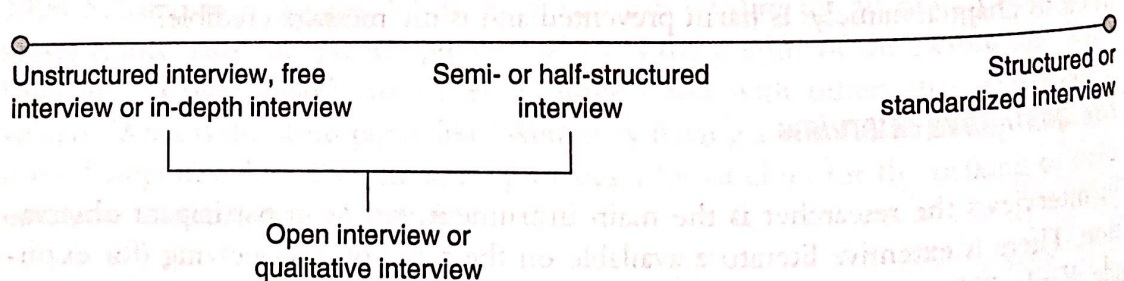


FIGURE 4.1 INTERVIEWS DISTINGUISHED BY THE EXTENT OF PRE-STRUCTURING (WEISS, 1994)

Interviews can also be categorized on the basis of their content and/or target group. For example, the term 'topic interview' means that the interview will encompass only one subject of interest. In comparison, the life-history or life-story interview

makes one's entire life history the topic of inquiry. The term 'elite interview' is used when high-ranking or well-known people are interviewed, and the term 'expert interview' is reserved for interviews with informants who have expertise on a certain subject (Gubrium & Holstein, 2002).

Like participant observation, interviewing is a demanding enterprise for researchers, as they have to decide on the spot which questions to ask, how to formulate them and in which order they should be posed. Later on, an interviewer immediately evaluates whether the answer provided by the participant is sufficient, or if further enquiry is warranted (Gorden, 1980). If it is, additional considerations include what the best reaction of the interviewer is and what it may yield in terms of information. 'Probing' refers to verbal or non-verbal behaviour of the interviewer when the interviewee's reply to the question is not relevant, clear or complete, and can consist of posing questions, keeping silent or giving non-specified encouragement ('uh', 'yes', 'yeah') (Gorden, 1980). Sometimes probes are distinguished from prompts, the latter referring to issues that the interviewer wants to direct attention to (Ritchie & Lewis, 2003).

Matthews (2005) states that researchers do not ask questions to elicit answers to specific questions but rather to make it possible for participants to talk about something in their own words. I will not go as far as Matthews, but in essence her remark is right: the goal of an interview is to see a slice of the social world from the informant's perspective and the interviewer is merely facilitating the process. Interviewees are invited to share their ideas and opinions and may do so to a large extent on their own conditions. The interviewer facilitates the process of remembering and articulating, and shows respect for what the interviewee has to say. Detailed and rich information is mostly obtained in a conversation in which both partners genuinely enjoy participating and feel respected by the other person. It is the interviewer who is mostly responsible for creating trust and openness. As mentioned in Chapter 3, ethical aspects need to be considered and the interviewer must balance research aims with each participant's individual interest.

Crucial for a successful interview is that the questions fit the interviewee's frame of reference. One aspect of this is that the questions match the research topic exactly as it was introduced by the interviewer and to which the participant has agreed to participate. Both conversational partners then know more or less what the interview will be about. Another aspect of fit is that the topic needs to be of concern to the participant and the questions need to be posed in a language that is understandable. During the interview it is paramount that the interviewer to some degree accommodates the participant's need to spend more time on certain issues, listens with interest, and does not interrupt the flow. Jumping from one question to another, irrespective of what has been said before, is detrimental to the interview (Morse & Field, 1996). A calm, attentive interviewer can achieve wonders.

Focus groups

Qualitative interviews with more participants at a time are referred to as group interviews. Focus groups represent a specific set of group interviews that particularly emphasize the interactive patterns among group members and how they come to generate

mutual understandings and ideas (Duggleby, 2005; Morgan, 1997). A definition is given below:

A focus group is a group interview – centred on a specific topic ('focus') and facilitated and co-ordinated by a moderator or facilitator – which seeks to generate primarily qualitative data, by capitalising on the interaction that occurs within the group setting. (Sim, 1998: 346)

Focus groups use interviewing techniques with discussion taking place under the guidance of a moderator (Gibson, 2007). Tasks and activities can be employed as well, like drawings, role-play and vignettes. An assistant moderator usually does not actively take part in the discussion, but takes notes, observes group interactions and supervises recording equipment. Group size should be tailored to trigger lively discussion and at the same time allow everyone to participate. A number of six to ten will usually do, but depends on the participants and the subject of interest. Regarding group composition, homogeneity is often preferred for instance on gender, ethnicity or 'with' or 'without' a certain experience. Recruitment, sampling and scheduling of focus groups can be quite demanding, since a number of people are required to show up on a certain date at a certain place and 'no-shows' are a well-known phenomenon (Gibson, 2007).

Focus groups are an excellent way to collect data on group norms and to find out what is (and is not) expressed in a group context (Kitzinger, 1994). Referring again to Harry Potter: while in the wizard society at large 'he-who-must-not-be-named' was still a taboo topic, Harry, Hermione and Ron did mention his name as a strategy to break the spell (Rowling, 2008). In the research context certain groups may consider talking about a particular topic as offensive. This should be taken into account during any enquiry related to this topic and the questions or approach adjusted accordingly. Focus groups may also be used when the communication and construction of certain knowledge is the main interest of research. Focus groups show us in situ how people determine and/or change their point of view in terms of sources, arguments and evidence.

When data collection takes place in a group, ethical reflection is necessary on two counts. First, the disclosures by participants are to group members as well as to the researchers. Second, there will be a level of stress and distress as a consequence of group discussion taking place (Gibson, 2007). For the benefit of the moderator and participants alike, the moderator should prepare how to monitor stress levels and how to manage such a situation if one arises (Gibson, 2007).

With respect to the quality of the data, the strengths and weaknesses of focus groups must be taken into account. Group discussions can elicit rich, experiential information if managed sensitively, and participants can feel good about sharing their experiences. Conversely, if participants feel that their point of view is not respected, they could become upset or angry (Carey & Smith, 1994). Everyday forms of communication such as anecdotes and jokes tell us something about what people 'know', and this is what differentiates focus groups from individual interviews, which tend to be more formal (Kitzinger, 1994).

However, censoring and conforming can take place. Censoring means that the dominant norm of the group is not to mention or talk about a certain topic or to express a certain view on it. Conforming means that people agree with the dominant opinion of the group, sometimes even going further in voicing their own opinions (Sim, 1998). An example of this might be feeling strongly that perpetrators should have a fair trial, that they should be punished or imprisoned, that they should have life long sentences or be hanged.

Since the information elicited is very much a function of each group interaction, the group interaction data should be taken into account when analysing the data (Carey, 1995) (see Chapter 7). Group interaction data reflect the interactive patterns within focus groups (Duggleby, 2005). They show us which subjects the participants agree or disagree on, and which subjects they prefer not to talk about at all. The transcripts show the verbal elements of focus group interaction data as to how people verbally settle issues, share experiences, construct an argument, and which arguments and speakers weigh more than others. Another source of interaction data are observations documented in field notes. The assistant moderator can note non-verbal behaviour (nodding, applause, frowning, raising hands for turn-taking and so on) as well as linguistic and atmospheric elements, like a heated discussion, talking at the same time, talking loudly and so forth. These notes can be connected to the verbal exchange on the recordings.

Sometimes focus group data are considered to be of less value than individual interview data: the contribution of its members consists of what they chose to share in a particular group; therefore it is unlikely that in another mix of group members the exact same information would be collected (Carey, 1995). Remember that this is exactly why focus groups are organized: it is because we want to simulate how a group progresses when brought together. This stems from the assumption that people in general do not develop their opinions and views in a vacuum but operate in groups all the time. A focus group is a social setting and therefore the data may be a better reflection of 'reality' than data collected in a non-social setting (Carey & Smith, 1994).

Visual data

Visual data refer to the recording, analysis and communication of social life through photographs, film and video (Harper, 2007). There is a distinction between extant visual images that have not been produced for the research and research-generated visuals that have been produced by the researchers or at their request (Bryman, 2008). Here we focus on research-generated visual data. In anthropology photographs have been used to capture cultural phenomena and illustrate and explain cultural events. In sociology the accent has long been on documentaries showing work, social class, social problems, urbanization and so on. The sociologists were attracted by the involvement of the documentary makers with the subjects and the insider's knowledge they showed (Harper, 2007).

The quality of scientific research using visuals as data is of concern. With manipulation of images by software packages being so easy, one aspect of the debate is whether the

picture is 'true' in the sense that it is a real image of reality at that moment. The photographer can arrange a scene and leave things out if preferred. However, it is widely acknowledged that pictures are merely productions of the photographer who operated the camera. Therefore a photograph can offer only a partial view on reality and cannot be considered an unmediated visual report.

The generation of visual material can be used as a stand-alone method. The choice of this method is most useful when observing spaces, places, the environment and objects. The same applies when photography or video is used to collect data on, for example, everyday life of community members, like video-taping a playground in a school for the deaf to learn about hearing-impaired culture (Alexander, 2008). Visual materials can also be used in combination with other methods to generate data, for instance when photographs are showed to a participant in an interview or a film to members of a focus group. Participants are then asked to comment on the images. These methods are commonly referred to as 'photo-elicitation' interviews (Collier, 2001).

People can be interviewed on the basis of extant photographs or photographs taken by the researcher. Schwartz (1989) took thousands of pictures in a rural community and catalogued them herself. She presented a selection of pictures to members of different generations to examine how they interpreted certain scenes and changes in the village. She also found out that visibly taking pictures in the streets brought her into contact with most of the villagers, which made later contact easier. In market research, photo-elicitation is a well-known technique to examine associations that people are not explicitly aware of themselves, like the ideas and emotions that are connected to a certain brand of products, such as shoes, watches or perfumes.

A different application of visuals is when the participants are asked to take their own photos to be used later as interview stimuli. The use of this method can reveal for instance the world from a child's point of view, from that of a person with a mental or physical disability or from the perspective of someone who has difficulty verbalizing. Pictures can be analysed for their content as well as for the meanings of the images and the reason they have been taken (Radley & Taylor, 2003). This method was used by Clark-Ibáñez (2007) when studying inner-city childhood in South Central Los Angeles. She gave the children who participated in her research disposable cameras to take pictures of the people and the things that were most important to them. They took photos of friends, family members, doll collections, trophies, fan books, refrigerators, computers, trees, kittens and so on.

Clark-Ibáñez found that there was nothing inherently interesting about the photographs and that they did not necessarily represent reality. More importantly, the photographs acted as a medium of communication between researcher and participant and added a lot to the conventional interview. They eased the relationship between researcher and interviewee and lessened some of the awkwardness of interviews by providing a photo to focus on. Photo-elicitation interviews became an excellent method to engage young children as well as their families. All viewers joining the discussion had their own perspectives and realities about the details in the photos.

Photos taken by the participants empower them to raise issues that would otherwise not have been addressed, and as such draw out meaning that would otherwise not have been found. An example is a student in the study of Clark-Ibáñez (2007) who photographed a tree across the street that she could see but could never really touch. For her the tree symbolized her confinement to the house, which she was unable to leave due to being an illegal immigrant. The photos illuminated viewers' lives and experiences. Photographer interviewees can point interviewers to elements in the picture that they would otherwise have overlooked.

Needless to say, the use of visuals is bound to ethical behaviour as described in Chapter 3. Consent is required when creating visual materials in private locations, and although it is allowed in public settings such as zoos and airports, people may still find it obtrusive and could object. When using images in presentations and publications, agreements must be reached about the availability or display of the photographs with regard to the anonymity of others. The use of photographs carries potential problems that researchers must be aware of. Clark-Ibáñez (2007) communicated that the children involved were the first to view the photographs in order to give them the opportunity to take out any 'mistakes'. Photographs can show intimate and delicate scenes of home life that would otherwise not have been seen, which should raise awareness of confidentiality in the researcher's mind.

Instruments used

This part of the chapter focuses on the instrument used during qualitative interviews. Different terms are used, such as conversation guide, interview guide, interview schedule or topic list, that reflect the somewhat fuzzy nature of the instrument and its application. To develop a measuring instrument, the research questions are converted into topics which may be raised in the interview and into questions which may be posed (Mason, 2002). Hence, the topics and the questions will correspond with the main research questions. The development of a topic list involves linking the research questions to the topics and vice versa, checking the legitimacy of every single question on the topic list.

When most of the topics have been decided, the next step is to group them into blocks of questions that belong together and to organize those blocks into a logical sequence that will facilitate the participant as much as possible. Thinking in blocks of questions is useful, since the interviewer can introduce the blocks with a lead-in question to the interviewees. The blocks are reflected in the layout of the instrument as well. Nonetheless, this order should not be imposed on the participant. The interviewer should be prepared to use the instrument in a flexible way and to pose the questions in an entirely different sequence if necessary.

Topic lists may take different shapes. Some researchers use long, relatively structured lists, whereas others settle for short, bulleted enumerations of relevant topics.

The main goal is to make the list a useful instrument for you as an interviewer. The development of an adequate interview instrument is part of the preparation stage of your research (see Chapter 2). Let's have a look at two examples. Box 4.1 displays one part of the topic list from research on medical students' perceptions on women in medicine and contains a comparison between male and female students (Lempp & Seale, 2006). These researchers use an hour-glass model: they start with a general question (any gender differences), then further detail (training experiences, medical specialities, respect) and then broaden again (future of women in medicine). Notice that the questions are accompanied by bullets for further probing.

BOX 4.1 EXAMPLE OF A FLESHED OUT THEME ON A TOPIC LIST

Women in medicine

- in your experience are there still any gender differences within the medical profession?, i.e. are the training experiences of female medical students different from male medical students during the studies? (can you give examples, how, why?) (or, are students treated equally during the training?)
- do you think that women are more suited to certain kinds of medical specialities than men? (which/why?)
- do you feel respected as a medical student in the class room/clinical setting (by patients, other professionals, doctors?)
- if no, why not, can you describe what happens?
- if yes, can you describe what happened? (or have you been humiliated/best or worst learning experience?)
- in your opinion, what are the likely scenarios for the future of women in medicine?
- finally, in relation to the issues discussed, is there anything else you want to add or you think is important which should be included in this study?

(Lempp & Seale, 2006: 7)

A different example comes from Lee and Kim (2007), who explore government perceptions on information systems/information technology (IS/IT). They distinguish three blocks of interesting areas, namely basic demographics and organizational details, current status of IS/IT in the department, and IS/IT planning and management. To explore the current status of IS/IT in the department, they generated the questions and topics given in Box 4.5. In contrast with the first example, these authors have a more structured instrument with fewer probes for examples and even some closed questions. It is possible that they have chosen this format to fit the target population, being government employees with little time and therefore a need for clear and concise questioning.

BOX 4.2 EXAMPLE OF A PART OF A TOPIC LIST*Current status of IS/IT in the department*

What is your opinion about the effectiveness of your current information systems in your agency?

Would you please tell us any major IS/IT that your agency is using in relation to the public service?

If the agency has implemented a major new information technology, answer the following questions.

We believe you have experienced changes triggered by this new information technology.

What do you think is the impact of information technology?

Does it ever influence your organizational structure?

Does it change the contents or procedures of your workers' tasks? If so, how?

(Lee & Kim, 2007: 138)

Always prepare a clear and engaging introduction to your interview. If you are a bit tense about the interview, it will help you when the introduction does not need much thinking. Introduce yourself as well as your research. You must thank the interviewees for participating and probably for welcoming you in their homes. Remember that you must ask for permission to record the session, and point out to interviewees that they may stop the interview if needed. It is useful to give an indication of the time that the interview will take and to ask whether the interviewee has this time available for you. Also very important is that you explain the intention of the interview. Interviewees are often accustomed to structured interviews and will expect a question and probably some answering categories. Do point out that you are interested in their opinions, experiences and ideas, and that it is their story that is of importance. Your questions only help to retrieve information. The question that you start with will therefore set the stage, and you should try to formulate it in the best possible way.

So how does the topic list function during interviewing? First of all, it reminds you of the topics and questions that matter. The topic list reduces the amount of instant improvisation and acts as a prompt if you lose track. Second, the instrument focuses data collection. Poorly prepared interviewers sometimes stray off focus and just ask what they think is appropriate. This will undoubtedly lead to missing data on areas of interest and a high level of unnecessary information (Morse & Field, 1996). Third, the experiences of previous interviews are processed in the emergent topic list. Questions that fall short are removed and missing questions added. Interviews conducted at the start of the research will therefore not be completely comparable

to the last ones. And they should not, since at the end you will mainly ask questions to confirm your provisional ideas. Fourth, the instrument is a forerunner for what you are after and for what you think will be of interest later on. If you planned correctly at the beginning it will help you when structuring the analysis stage, although in qualitative research there will never be an exact match between questions prepared, answers given and ultimate findings.

Writing memos

Many relevant impressions, spontaneous ideas, evaluations, solutions and thoughts are often forgotten, because field work and analysis demand so much attention. It is therefore advisable to write memos or notes. Memos can function as a link between thinking and doing and they are comparable with the use of yellow Post-it notes. Memos form a kind of project log: a chronological overview of the decisions made and how they guided future actions of the researchers. Memos are useful for monitoring the development of the research project, asserting quality of the research (see Chapter 9), writing the report (see Chapter 10) and discussing progression in a team of researchers.

In the literature several types of memos or notes are distinguished, for instance between observational memos, methodological memos and theoretical memos (Schatzman & Strauss, 1973). Observational memos are also known as field notes. The researcher uses them to describe observations made in the field (see earlier in this chapter). Theoretical memos reflect how findings are derived from the data. As such, memos are pathways into your data that form an intermediate step between analysing the data – in particular coding – and the reporting phase (Hesse-Biber & Leavy, 2006). Methodological memos contain all thoughts relevant to the methods used.

Among others, methodological memos record the researcher's learning experiences during the research with regard to methodological issues. For instance, when several participants tend to ask you what you mean after asking the exact same question in the interview, a methodological memo can be used to record that the question should not be asked in this manner again and that the topic list must be adjusted. In this way memos have a special function in tracking the evolution of a research project. Memos can be used by independent experts, so-called auditors, who reflect upon the quality and thoroughness of decisions taken during the research (see Chapter 9).

Methodological memos can hold researchers' reflections on their own role during field work. This is useful when writing a methodological account and valuable for exchanging experiences within a team of researchers from different disciplines (see Chapter 9). When used in this way, the memos resemble a field-work journal in which the researcher reflects upon personal experiences and impressions pertaining to the research. These are sometimes thought to be invaluable when interpreting the data during analysis.

Memos are not often documented in research reports. Box 4.3 offers diverse examples of different types of memos. The first one is an illustration of an ethical issue that occurred during research into trauma patients' perspectives of their motor

vehicle crashes. The second one is an example of a methodological memo in which the researcher reflects on conflicting feelings in a study into donor relatives. The last example is a theoretical memo from research into nursing home residents with dementia and their relationships with staff members, and contains some preliminary interpretations of observations.

BOX 4.3 EXAMPLES OF MEMOS

This informant indicated in the interview that she may have been trying to kill herself. I had to convey this information to her physician and ask for a psych consult. I couldn't believe that no one else had picked up on this. Her behavior was almost too blatant. I never thought I would run into this and I don't want to break the confidentiality of the researcher/informant relationship. I hope she understood when I told her why I had to discuss this with her physician. (Stinson Kidd, 1993: 324)

This was a very difficult interview to maintain the researcher's role and not to slide helter skelter into the nurse's role for the reasons of expressing my own anger at the poor caring skills employed by so many of the care professionals (...). (Sque, 2000: 29)

Quite a lot of residents on this ward experience grief. They cry because they want to go home. They ask for help to return home. The carers react to the grief by administering medication, verbally correcting the behaviour, and ignoring the behaviour entirely. These reactions are in accordance with the care plan. The grief is defined in various ways by the care givers: as fake, as unnecessary or as part of the disease. (Bosch, 1996: 52)

To fulfil the functions described above, memos need to be kept systematically and not in a haphazard way. Modern software for qualitative analysis offers possibilities to create memos and to link them to specific elements of a research project, such as documents, fragments of texts and codes. The use of computers is dealt with in more detail in Chapter 7.

Preparing data for analysis

In this chapter we dealt with some of the most used methods for data collection in qualitative research, namely participant observation, qualitative interviews, focus groups and visual aids. These methods produce, for example, field notes, cassette tapes, digital recordings, transcribed interviews, videotapes or transcripts, photographs, drawings and maps. As a consequence qualitative research is primarily text-based, which determines to a large extent the way in which analysis is conducted. Texts contain the natural language of those under investigation, and more often than not

are detailed and unstructured. The unstructured character of the data is the result of only slight structuring at the outset, as was described earlier in the chapter. Topics deemed relevant for the research appear at different places in the research material and often use different terminology. One function of the analysis is to create structure to this disorder.

Data as they are originally generated are also known as 'raw' data. Getting these raw data ready for analysis requires preparation. Preparing the data is part of 'data management', a term which refers to the systematic, adequate storage and retrieval of data and of preliminary analyses. Proper data management contributes to transparency and facilitates the possibility for others to see what has transpired during investigation and analysis (McLellan, MacQueen & Neidig, 2003) (see Chapter 9). Four aspects of data preparation are addressed below.

One aspect of data preparation is the organization of the storage of different data files so that they can be easily retrieved. Most often the researcher will have more than one data source available during analysis, such as a file containing the researcher's observations, a log, digitally recorded interviews and photographs. The data in these various files are supplementary and the researcher uses all of them to comprehend the studied phenomenon. A neat archive will prevent many hours of searching for that one note or that particular quote or interview. Documentation is vital to research, will continually change and is dynamic in nature. Documenting analyses that have just been carried out and ordering researcher memos are very important as well (Miles & Huberman, 1994).

A second aspect of data preparation is the transcription of audio and visual sources. Image and sound recordings are usually transcribed so that the researcher may work with texts, sometimes in combination with the original recordings. Visual and audio recordings hold great advantages for the entire research (Chapter 9), and the analytical phase in particular, as recordings:

- benefit the quality of the data, as they allow the researcher to focus on the interview or observation without having to worry about taking notes.
- improve the quality of the data, as the researcher does not have to select what to take notes on and what not. Additionally, there is no distortion of the data resulting from this selection process.
- provide more of an insight in the subject under study because both the questions and the answers are registered, making it clear who is talking about a certain topic in response to a certain question.
- benefit the quality of the research as they enable discussion of the literal interviews or observations with peers, involving both the researcher's observation- and interview-techniques as well as interpretations of certain parts of the data.
- are considered to be an important guarantee of data quality and at the same time show the reviewer that the researchers care about quality.
- provide literal quotes that can be used in the final report for the readers to judge the relationship between the original data and the researcher's interpretations.

During the transcription of recordings, the data are altered. Non-verbal behaviour such as facial expression, posture, tone, rhythm and intonation is lost. The way in which the transcription is conducted depends on the goals of the research and of

analysis in particular. In order to compensate for the loss of information, researchers can create elaborate memos, as discussed above, in which they describe impressions, observations and oddities. The memos play an important role in the depiction and interpretation of the data. However, the language-oriented types of research, such as conversation analysis and discourse analysis (see Chapter 1), require a different kind of transcription. In such an analysis, pauses, emphasis, alternation and so on have to be marked with a specifically designed transcription system. Transcription is dealt with in more detail in Chapter 10.

A third element of data preparation is taking out all information that can identify participants and violate the promise of confidentiality. This means that with a view to ethics as described in Chapter 3, the informants will not be identified on transcripts of interviews, notes or memos. The best method is to assign each participant or site a unique code number or pseudonym that will be used with all data. All names, places and other unique identifiers need to be taken out. This should be borne in mind when sharing the data with the participants in order for them to make accuracy checks.

A fourth and final part of data preparation is the manipulation of data that might be necessary for processing qualitative data analysis with the computer. Some programs need a few software-specific operations before the texts can be entered or imported and processed (Lewins & Silver, 2007). More and more data preparation including transcription is seen as a critical research activity which influences the analysis and the claims that a researcher intends to make (Forbat & Henderson, 2005). It is to analysis that we turn in the next chapter.

Readings I learnt much from

- Gorden, R.L. (1980). *Interviewing: strategies, techniques and tactics*. Homewood, IL: Dorsey.
- Lofland, J. & Lofland, L.H. (1995). *Analyzing social settings. A guide to qualitative observation and analysis*. Belmont, CA: Wadsworth.
- Schatzman, L. & Strauss, A.L. (1973). *Field research: strategies for a natural sociology*. Englewood Cliffs, CA: Prentice-Hall.
- Spradley, J.P. (1980). *Participant observation*. New York: Holt, Rinehart and Winston.

Doing your own qualitative research project

Step 4: Collecting your data

1. In your view, what is the best way to collect your data? When you have chosen a data collection method, try to elaborate on how you are going to use it in as much detail as you can. Think for instance about the introduction of your research, the instruments used, your role as an interviewer or observer, taking notes and storing the data.

2. Think about how you are going to introduce your project to the people you want to involve in your project. Assume that data collection takes place by means of interviewing, but many of the issues raised below are also applicable to other methods of data collection. Make a list of what you need to ask, what you need to inform them about and what promises to make. Practise (on a friend) before you contact real participants to discover unanticipated requests. Approach the participants as soon as you are ready, since getting access can lead to delays if not dealt with efficiently.
3. Prepare or adjust the topic list or observation scheme that will be used (see 'Instruments used' in this chapter). Pay attention to the introduction of your interview or visit to the field. Practise on a friend and adjust the list when necessary. This will take some time since the preparation of data collection is intensive.
4. Spend time on finding out what data management will mean for your project. What type of data will you collect? How should you store the data? Will audio and visual materials be transcribed, who is going to do that, and who will give instructions about transcription guidelines? Are you planning to use software for qualitative data analysis? Does the data need to be prepared for using this specific program?
5. Schedule some extra time after each round of data collection to write a memo with a brief summary, key findings and an evaluation of that day's session. This is extremely useful when working in a team of researchers as it enables you to catch up on each others' progress.
6. Reflect on the experience of the first round of data collection. Possible bottlenecks in recruitment become evident at this stage and solutions can be thought of. Weaknesses in your instruments can be rectified, such as questions that were not used, questions that need to be added, changing the sequence, and so on. Try to talk regularly with others about decisions and progress. Peer debriefing will sharpen your arguments, improve your interview and observation techniques, decrease potential bias and increase your self-confidence.
7. Record, for instance in memos, how data collection took place. This will help you to write your methods section in the final report. Think about the average time that an interview lasted, who conducted the interviews, where they took place, how many people would not cooperate and for what reasons. What can you say about the participants' responses to you as a researcher, why did they want to cooperate, what could have influenced the quality of the data, what have you learned during data collection?
8. When the interviews have been transcribed, check that the guidelines on editing and anonymity have been adhered to.