The effect of interview recording on quality of data obtained: a methodological reflection


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Abstract

**Aims** This article reflects the author's experience of qualitative interviews during his research project. It attempts to highlight how recording interviews can affect data collection and data quality.

**Background** While recording helps researchers keep accurate records of interviews, which in turn assists them during their data analysis, its effect on data quality has not been clarified in nursing literature.

**Discussion** The research experience highlighted that interview participants, especially those involved in group interviews, were reluctant to give permission for recording and were less comfortable and more formal when being recorded.

**Conclusion** The preparation for, and how the interview is carried out, can either reduce or further accentuate the effect of interviewing and recording on the participant. Therefore, appropriate strategies to reduce the effects should be implemented.

**Implications for research/practice** This article suggests strategies to minimise the effects of interviewing and recording of interviews on the participants and hence enhance the quality of data obtained.

**Keywords** Qualitative interview, participant, interview recording, data quality, data collection, data analysis, methodological reflection

Introduction

QUALITATIVE RESEARCHERS agree that the interview is a powerful way to try to understand people. Whether face-to-face or in groups, the interview is among the oldest and most common methods of data collection and has been used extensively in this type of research (Guba and Lincoln 1981, Donalek 2005, Holloway 2008).

The narrative data obtained during interviews from participants, such as patients and clinicians, are rich and are often used for planning new services, altering current ones, informing policies and testing theoretical models.

Data obtained from qualitative interviews are usually recorded, transcribed and then inspected for evident themes. Recording is usually achieved through audio or video techniques, and this process has a great deal to offer the researcher. The recording can be viewed or listened to repeatedly in case of doubt or during data analysis, and it also provides a basis for reliability and validity.

Quantitative and qualitative researchers rely on the interview as a technique to gather data. The underlying assumption is that interviewing results in accurate information about respondents and their lives, despite the many factors that have been identified that can affect how the interview is conducted and the quality of data obtained (Guba and Lincoln 1981, Fontana and Frey 2003).

It is important, therefore, to ensure that the interview is efficient and that the data gathered are as rich, accurate and close as possible to reflecting the real phenomena being studied, so that any conclusions drawn are as accurate as possible. Identification and careful consideration of the factors that adversely affect interviewing,
then using strategies that overcome or neutralise these factors can help achieve this accuracy.

Factors that affect interviews fit into three categories (Singer and Presser 1989, Morgan 1997, Arksey and Knight 1999, Fontana and Frey 2003). They are those related to:

- Interviewers. For example their experience, their gender, age and race.
- Participants. They may deliberately try to please interviewers or attempt to prevent them learning something about themselves through the ways in which they respond, or by omitting particular information.
- Question format. The questions used in the interview, such as leading questions, that can affect the responses and impede communication.

In this paper, I will also discuss the effect of recording interviews on the quality of data obtained. This discussion will be based on my knowledge of conducting a mixed-method study of the experiences of adolescents with cystic fibrosis, their parents and healthcare professionals during the adolescents’ transition from a paediatric to an adult healthcare setting in Ireland.

In-depth interviews
I carried out face-to-face, in-depth interviews with the adolescents and their parents before and after they were transferred to the adult hospital. I also conducted similar group interviews with the healthcare professionals who took care of these adolescents so that relevant transitional service interventions that address the adolescents’ and their parents’ needs could be developed.

I noticed that recording affected the ease with which participants exchanged data with me and their comfort levels during the course of the interview. Although there is significant literature about the recording of interviews (Stockdale 2002, Given 2004, Fernandez and Griffiths 2007) that recommends its use, there is a lack of information about any effect such recording might have on the interviewee and consequently on the quality of data obtained.

This raised three questions for consideration as follows:

- Does recording interviews have an effect on the interviewee and hence affect the quality of the data obtained?
- Does recording cause participants to be reluctant to express their views and experiences freely or to present these views or experiences in a different way?
- How do researchers minimise the effects of recording on interviews and hence enhance the quality of data obtained?

Drawing on literature from psychology and healthcare research, this paper explores these questions and examines the following elements: meaning of self, possible effect of recording and similar effects reported in the literature. Finally, strategies that might help overcome these effects are suggested.

Meaning of self
A detailed discussion of the meaning of ‘self’ goes beyond the goals of this paper. However, the concept of self is widely used in psychology and sociology. It has been defined as the cognitive and affective representation of a person’s identity (James 1890), and as a signifier of the coherent whole, unifying the conscious and unconscious mind of a person (Jung 1921). More recent definitions of self describe it as playing an integral part in motivation, cognition, affect and social identity (Sedikides and Spencer 2007).

The word self as defined in sociology consists of the ‘I’ and ‘me’ parts, where the ‘I’ is ‘spontaneous, inner, creative and subjective’, and the ‘me’ connects with wider society. The latter is often referred to as how people see themselves through the eyes of others and is much more amenable to study; it evolves through communication with others (Scott and Marshall 2009).

A distinction between the extant self (our picture of what we are like), the desired self (what we would like to be like) and the presenting self (the way we present ourselves in a given situation) has been drawn; the presenting self varies depending on the context and the setting in which the presentation takes place (Rosenberg 1979).

The presenting self reflects what the presenter wants to disclose about himself or herself (Basavanthappa 2007). Through this presentation of self and interaction with others, the self comes into existence, and will be formed, created and made (Zinkin 2008). When interacting with others, however, we try to present ourselves in a more, or sometimes less, favourable way than might really be the case.

Sartre (1969) explained that people can be affected when being observed by other people or entities, such as a video or audio recording, the world is no longer the same and they will start to try to gain the other people’s approval and manipulate their judgements. Likewise, interviews – whether informal, such as everyday conversation with other people, or formal, such
as a research interview – represent occasions where we usually interact and present an image of ourselves to others.

However, the way we act during these interviews and how we present ourselves might be different from what we are or how we behave normally. The differences between the extant self and the presenting self can alter, affect, redirect or mislead the research, or at the least toughen analysis because of the non-homogeneous data collected from participants.

The interview, by its very nature, poses a threat to the quality of data obtained. However, the benefits of this powerful tool warrant the threat being contained by the imposition of as many controls as possible on factors that might affect the interview process. Among these factors is recording, which can further exacerbate the effect of the interview on the participant and distort the picture even more.

With the research in which I was involved, the participants’ willingness to describe, comment or critically appraise the aspects of their experience (in the individual interviews) or current practice (in group interviews) was affected by the presence of the voice recorder. The participants were initially defensive about their practices during the group interview but, as the interview continued, they started to engage more actively in the discussion and to appraise their practice critically. While this was undoubtedly influenced by my emphasising that the interview was focused on their experiences and views and not necessarily their practice, it may have also reflected the diminishing over time of their awareness of being recorded.

During the pilot group interview, some participants did not want the group discussion to be recorded, believing that discussion might focus on, or question some, of their practices. Therefore, I carried out the interview without recording it. I recorded the next interviews, although discussions were more constrained, leading me to explore the issue in more detail.

**The effect of recording on data**

Although there can be no definitive answer as to whether or not recording has a significant effect on the quality of data obtained during an interview, the question is important because it encourages more critical discussion and could produce suggestions for avoiding or reducing factors influencing the quality of data.

Sartre’s (1969) ideas are echoed in Paterson (1994), who suggested that interview participants might be affected by the presence of the researcher or by their awareness of being part of a study: participants recognise that their experiences, opinions, actions and attitudes are being listened to and watched, and that they might be evaluated or judged by another person. Therefore, it is in the participants’ best interest to try to present themselves, their experiences, their opinions, their actions and their attitudes more favourably. The concept of a person wanting to present himself or herself in the best possible way is further complicated when these experiences, opinions and actions are recorded because participants might be even more aware and cautious about what they disclose and share during interviews or interactions.

The effect of recording could be greater in group interviews, where participants are asked to present, for example, their ideas, concerns, experiences, opinions and sometimes private data to the group, even more so if the participants are from different socio-economic, cultural or professional backgrounds, know each other, either socially or via the work place, work at different organisational levels or in the same place for the same organisation.

**Engaging participants**

Ease of interaction was determined by the engagement of participants and the extent to which they were able to relax their defence of practice or experience and appraise both critically to reach useful conclusions on how to improve in these areas. When conducting interviews for the research study, I noted that when I did not record interviews, communication tended to be less formal, more sociable, and more spontaneous – ordinary conversations with considerable interaction and a sense of ease in the exchange of information.

But even though participants accepted the recording as part of the study, the interactions that took place when they were recorded were less relaxed and achieving a high level of conversational interaction similar to that before recording started was more difficult. Some of the healthcare professionals working in the same hospital and the same department rejected recording and engaged more actively in the group discussion when the tape was turned off.

It seemed that recording had an effect similar to the well-known Hawthorne effect (Knapp 1998, Polit and Tatano Beck 2006), as well as the ‘subject reactivity’ effect (Sobell and Sobell 1981, Clifford and Maisto 2000) and the ‘subject
Avoid anything that provides a visual indication of the process, such as external microphones, clip microphones, and recorders that need frequent checks or changes of tapes or batteries.

Prepare for the interview. Arrange to meet participants before the interview. This is not to hide the recording process, of which the participant should already be aware, but to allow interviewer and the participant to focus on the interview and have a less formal conversation.

Explain research goals and procedures carefully to participants during the initial contact when they sign the consent form. Subsequently, reminding the participants about their voluntary participation and interview recording can make the interview formal and less informative, so this reminder should be avoided.

Select an appropriate setting for the interview. It should be chosen to make the interview look like everyday social conversation is taking place.

**Box 1 Strategies that can be used during audio and video recording of interviews**

- Use an appropriate study schedule.
- Prepare a schedule or guide of the interview with the aim of making the questions feel spontaneous to the participant.
- Organise appropriate technology for recording.
- Use a highly sensitive recorder, preferably as small as possible, so that it will be unobtrusive during the interview.
- Avoid anything that provides a visual indication that you are recording the participant, such as external microphones, clip microphones, and recorders that need frequent checks or changes of tapes or batteries.
- Prepare for the interview. Arrive early to arrange the setting and to fit and check the recorder ahead of the participant. This is not to hide the recording process, of which the participant should already be aware, but to allow interviewer and the participant to focus on the interview and have a less formal conversation.
- Explain the research study. The interviewer should also obtain consent to participate before carrying out the main interview. This can help the interviewer and participant become more familiar with each other, break down barriers, build trust and ease the interview process for both parties. It also avoids including these formal procedures in the main interview, which might otherwise distract the interviewer and participant.
- Explain research goals and procedures carefully to participants during the initial contact when they sign the consent form. Subsequently, reminding the participants about their voluntary participation and interview recording can make the interview formal and less informative, so this reminder should be avoided.
- Select an appropriate setting for the interview. It should be chosen to make the interview look like everyday social conversation is taking place.

Desirability effect (Guba and Lincoln 1981). These phenomena, which show how study methods can affect participants, can occur with different data collection methods.

The Hawthorne effect is more frequently reported in qualitative and clinical studies, and describes how participants' awareness of being in a study can cause them to change their behaviour, potentially obscuring the effect of the research variables (Knapp 1998, Polit and Tanto Beck 2006).

‘Subject reactivity’ describes the effect of a study’s procedures on its participants or subjects. Clifford and Maisto (2000) reported that follow-up interviews to assess the effect of a particular research intervention on interviewees may have been therapeutic, thus affecting the study results and outcomes. This means that the participants reacted consciously or otherwise to the fact that they were participating in the interviews and this reaction had the potential to alter the research outcome (Sobell and Sobell 1981).

‘Social desirability bias’ affects the information that participants disclose, especially when talking about sensitive, highly personal or illegal issues. When talking about these issues, participants tend to be unwilling to disclose much information or do not answer honestly because they want to present themselves favourably (Davis et al 2010). Some seem to be more willing to protect their social semblance, and consequently are less willing to disclose information that might alter this picture; others may be willing to exaggerate the information they disclose to lead the researcher in a different direction, which might affect the study’s results.

**Suggested strategies**

To obtain the highest possible quality of data during interviews, researchers should use strategies to control all affecting factors. Among these strategies is prolonged engagement with participants, especially before interviews take place, or conducting multiple interviews with the same participant (Sherman Heyl 2001). Both strategies can familiarise the participants and the interviewer with each other and build mutual trust.

This is particularly important when it is a one-off interview, because the researcher must be skilled enough to create trust in a relatively short space of time. The interviewer should therefore allow time before interviews to tell participants something about themselves and create a feeling of being known.

Audio and video recording offer much, but they can affect the quality of data, therefore it is imperative that an alternative method – such as note-taking – is considered if there is any suggestion that the data will be significantly affected. If, however, you decide that recording will greatly benefit your study, you should use strategies to overcome the potential effects on the respondents and consequently on the data obtained (Box 1).
Conclusion

Although their effect on data quality has not yet been clarified, audio and video recording are valuable tools that help researchers keep records of interviews, which in turn helps them during data analysis.

Researchers should therefore weigh these benefits against the possible effects and decide whether or not it is appropriate to use this method or if an alternative method should be found.

My experiences with some interview participants, especially those in group interviews, showed that conversations were less chatty and more formal when recorded; however, the actions of a researcher, and the preparation for an interview and its conduct, can minimise the impact of recording.

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