10.1 Qualitative research: theory and practice

Learning outcomes

- Distinguish between qualitative and quantitative data
- Explain strengths and limitations of a qualitative approach to research
- Discuss the extent to which findings can be generalized from qualitative studies
- Discuss ethical considerations in qualitative research
- Discuss sampling techniques appropriate to qualitative research (e.g. purposive sampling, snowball sampling)
- Explain effects of participant expectations and researcher bias in qualitative research
- Explain the importance of credibility in qualitative research
- Explain the effect of triangulation on the credibility/trustworthiness of qualitative research
- Explain reflexivity in qualitative research

Introduction to qualitative research

Academic psychology deals with a broad range of areas—from the action of single hormones to factors that may contribute to genocide and the role of human relationships on health. The diversity of psychology means that many different methods are used to gather and analyse data. The methods researchers choose to carry out research are dependent on a number of factors, such as the purpose of the research, the characteristics of the participants, and the researchers' beliefs about the nature of knowledge and how it can be acquired. The last part has to do with **epistemology**—that is, questions such as how can we know about the world? And what is the basis of our knowledge? Another part has to do with **ontology**—that is, does a social reality exist independently of human perceptions and interpretations?

There are three main questions in the debate in relation to epistemology, according to Ritchie and Lewis (2003). These questions are basic for understanding the differences between research in the natural sciences and the social sciences, although it is important to understand that social researchers adopt quantitative (e.g. surveys) as well as qualitative methods. The argument is that the two approaches should not be seen as competing, but as complementary to different types of research questions.

The discussion of the relative strengths and limitations of research methods is related to philosophical debates on the nature of knowledge and science, to which there are no definite answers, so the debate is likely to continue among researchers. The debate relates to different views of the world and how it can be studied. Some of these views are set out below.

1 *What is the relationship between the researcher and the researched?* In the natural sciences, the object of research is considered to be independent of and not affected by the researcher. The researcher is seen as objective and the research is seen as value-free. Qualitative researchers believe that being studied will affect people so that they do not behave naturally. The relationship between the researcher and the participants is not objective and value-free because the researcher brings assumptions into the research process and these influence the way data are collected and analysed. Therefore, the researcher needs to reflect on his or her own background and beliefs, and how these could play a role in the research process (**reflexivity**).

2 *What can be held as truth?* This deals with how the natural and social sciences regard what is "truth". In the natural sciences, truth is based on the **correspondence theory of truth**, which claims that the truth or falsity of knowledge is determined by whether or not it accurately describes the world. There must be a match between observations of the natural world and an independent reality. A more appropriate view for the social sciences is represented in the **coherence theory of truth**. This theory claims that the truth or falsity of knowledge is not absolute, but rather consensual. The truth is determined by whether or not it can be supported by other observations or statements. However, this is based on the assumption that "the truth" is somehow lodged in the data, and that a researcher and peer reviews could arrive at the same interpretation.

3 *How is knowledge gathered?* The natural sciences often rely on deductive processes—that is, hypothesis testing where the evidence is used to support a conclusion. The focus is on cause-and-effect relationships, generalization, and prediction. The social sciences often rely on inductive processes where the collected evidence is used to reach a conclusion. The focus is on understanding the complexity of social processes. It should be remembered, however, that the natural and social sciences use inductive as well as deductive processes in research.

It has been argued that qualitative research is not "scientific" because it is not built on the scientific method of the natural sciences. However, "science" as seen by some qualitative researchers should be defined in a broad sense as a systematic, rigorous, empirical task that must be carried out properly in order to produce trustworthy and reliable knowledge. This could include imposing procedures to ensure the quality of research. There is an ongoing debate among qualitative researchers as to whether reliability (i.e. if the research methods and techniques used produce accurate data) and validity (i.e. that the research explains what it intended to) can be used in qualitative research. Some argue in favour and attempt to reformulate the concepts to fit better with the nature of qualitative research, while others claim that the very nature of qualitative research does not invite reliability and validity checks. Yet another position is introducing new concepts to describe validity and to ensure transparency and consistency of conclusions in qualitative research through alternative ways of checking results. The IB psychology programme has adopted the last position.

According to Ritchie and Lewis (2003), the social world does not exist independently of individual subjective understanding, and researchers can only come to understand it through the participants' *interpretations*. This is the *interpretative approach* which is based on understanding things from the view of the people involved. According to Ritchie and Lewis, the external reality is diverse and multifaceted, and the goal of qualitative research is to get a picture of this multifaceted reality. The researcher should strive to be as objective and neutral as possible in the collection, interpretation, and presentation of qualitative data—for example, through reflexivity. They also argue that a combination of qualitative and quantitative methods may be necessary and helpful, but not all qualitative researchers agree with them.

According to Rolfe (2006), there is no unified qualitative paradigm, and it is only in qualitative research textbooks that it appears to be so. He claims that it makes little sense to talk about qualitative research as completely distinctive and separate from quantitative research.

Difference between qualitative and quantitative data

Psychological data come in many different forms, depending on the phenomenon the researcher is interested in. In quantitative research, the data are in the form of "numbers" that are easy to summarize and submit to statistical analysis. There are standard formats for data analysis, such as statistical tests. Quantitative data are meant for generalization beyond the sample from which the data were drawn.

Qualitative data are gathered through direct interaction with participants—for example, through one-to-one or group interviews, or by observations in the field. The data consist of text—for example, from transcripts or field notes. Textual data are open-ended and flexible—that is, they are open for interpretation. The term used is "rich data", which means that they are rich in their description of people, places, conversations, and so on. Because the data are rich (i.e. voluminous and open to interpretation), they are not easy to analyse, and there is no single way to approach analysis. Data may be analysed via theory or the data can generate theory. Qualitative researchers use what is called a "rich-thick" description of the data when they write their research reports to document their interpretation.

Strengths and limitations of a qualitative approach to research

Qualitative researchers are concerned with meaning—that is, they are interested in how people make sense of the world and how they experience events. They want to understand "what it is like" to experience particular conditions and how people deal with them. The objective of qualitative research is to describe and possibly explain events and experiences. This can lead to suggestions of how to overcome the problems that the research identifies. Qualitative researchers study people in their own environment, preferably in naturally occurring settings, such as schools, homes, hospitals, and streets.

Based on this brief account, we can outline some of the strengths and limitations of qualitative research.

Strengths

- Provide rich data—that is, in-depth descriptions of individual experiences based on concepts, meanings, and explanations emerging from the data.
- Particularly useful for investigating complex and sensitive issues, such as coping with illness, human sexuality, homelessness, or living in a violent relationship.
- Explain phenomena—that is, go beyond mere observation of phenomena to understand what lies behind them. (e.g. Why do people become homeless?)
- Identify and evaluate factors that contribute to solving a problem. (e.g. What initiatives are needed to successfully resettle people who are homeless?)
- Generate new ideas and theories to explain and overcome problems.
- People are studied in their own environment, which increases validity.

Limitations

- Can be very time-consuming and generate a huge amount of data.
- Data analysis can be difficult because of the amount of data and no clear strategy for analysis.
- Interpretation of data may be subjective (but reflexivity can help to minimize this).

Is it possible to generalize from qualitative studies?

Scientists normally want their findings to apply to other people than those who participate in a particular study. Generalizing findings from a study means that the results are relevant outside the context of the study itself. Some qualitative researchers do not find it relevant, but others argue that it is important that findings can be generalized. According to Lewis and Ritchie (2003), qualitative research could distinguish between the following forms of generalization.

- **Representational generalization**, which means that findings from qualitative research studies can be applied to populations outside the population of the study. A typical question could be if findings from interviews with people in a study on homeless people are representative of homeless people in general. This could have implications for the development of homeless programmes. Qualitative research normally involves small samples that are not selected to be statistically representative, and non-standardized interview methods may be used. This makes it difficult to generalize findings. However, if evidence from other studies confirms the findings, it is argued that generalization is possible (Hammersley 1992).
- **Inferential generalization**, which means that the findings of the study can be applied to settings outside the setting of the study. This is also called "transferability" or "external validity". If the study on homeless people is a pilot programme to test the effectiveness of a service to resettle homeless people, the

question is whether the findings can be applied to other services that provide help to homeless people. Whether or not the findings can be transferred to another setting will depend on the depth of the description of the researched context and the phenomenon. This description may allow for inferences to be made, but it will rest as a hypothesis until it is supported or disproved by further evidence.

- **Theoretical generalization**, which means that theoretical concepts derived from the study can be used to develop further theory. The findings from a study might lead to inferences about what could be effective policies to help homeless people. In that way, the findings from the study may contribute to wider social theory.

Ethical considerations in qualitative research

There are, overall, the same ethical issues involved in qualitative research as in quantitative research. These include informed consent, protection of participants from psychological or physical harm, respect for the participants' integrity and privacy, and the right to withdraw from the research. However, there are special ethical considerations to be made due to the very nature of qualitative research. The characteristics of qualitative or field research usually include long-term and close personal contact with the participants—for example, during interviews and/or participant observation, which may have implications for what the participants disclose to the researcher. It could also be the case that researchers become too personally involved in the problem under investigation and thus lose their objectivity.

Ethical issues in terms of anonymity may arise in case studies or in research designs with a small number of participants, because of the risk that they may be identified in research reports. In case studies where covert observation is used, the participants have not signed informed consent and do not have the right to withdraw from the research, because they do not know that they are being studied.

Informed consent

The rule is that informed consent should always be obtained. This is stressed in all guidelines on ethical conduct in research. However, in some cases, where it would not otherwise be possible to study a phenomenon (e.g. use of violence in a street gang), ethics committees may offer dispensation from the rule because the goal of the research is to obtain knowledge that may eventually prevent violence.

The participants should know that participation is voluntary. This is particularly important if the research is conducted by people who have some kind of relation to members of the sample, since participation could then be motivated by feelings of obligation. The researcher must provide the participants with sufficient information about the study, such as who funded the study, who will conduct the study, how the data will be used, and what the research requires of the participants—for example, in terms of time and the topics the study will address. It

should also be made clear that consent can always be renegotiated. In cases where children aged under 16 years are involved, consent must be obtained from parents or legal guardians.

Protecting participants from harm

The researchers should take preventive action in all research, to avoid harming the participants. This is particularly true in sensitive research topics, such as sexual abuse, domestic violence, or alcoholism in the family. Due to the nature of qualitative methods—for example, in-depth interviews—participants may disclose very private information that they have never shared with anyone before. This can happen because the interview situation seems like a friendly encounter, where the participant may feel comfortable and safe. However, the participant may regret such revelations and feel upset after the interview when the interviewer has gone. This situation should be avoided.

Prior to the interview, and before they agree to participate, the participants should have a clear understanding of the topics to be addressed. The researchers must approach sensitive issues through clear and direct questions, so that participants are not drawn into irrelevant and sensitive details by mistake. If the participants show signs of discomfort, the researcher should be empathetic and consider stopping the interview. If the interview has dealt with emotional and sensitive issues, the researcher should try to return to less sensitive topics towards the end. It is not advised that the researcher should provide advice or counsel the participant, but he or she might provide useful information about where to find help if this is necessary.

Anonymity and confidentiality

The participants should be informed about the issues surrounding anonymity and confidentiality. The identity of the participants should not be known outside the research team, but in cases where sampling has involved a third party (e.g. managers, friends, teachers), this cannot be done, and in this case the participants should be informed.

Confidentiality means that research data will not be known to anyone outside the study. The researcher may have to change minor details in the report to avoid the possibility of participants being recognized. Confidentiality also relates to the way data are stored after the research. If interviews or observations have been videotaped and archived, it can be difficult to guarantee total anonymity, so these should be destroyed when transcripts have been made. If the researcher finds it necessary to archive non-anonymized data, the participant should give written informed consent.

Sampling techniques appropriate to qualitative research

Sampling methods in qualitative research differ from those used in quantitative research, where the purpose of sampling is to generate samples that are representative through random selection of participants.

Sampling methods are classified as either **probability** (related to statistical probability and representativeness) or **non-probability**

sampling. Probability is generally believed to be the most rigorous approach to sampling for statistical research. Quantitative methods use inferential statistical tests based on samples that are randomly selected from a target population.

The sample numbers involved in qualitative research are much smaller than in quantitative research. The sample is not intended to be statistically representative. The researcher may still want to have a representative sample from a target population, but the focus is not on statistical representation. A sample in qualitative research is chosen because it represents *important characteristics* of a population, and it is these characteristics that are the main concern in evaluation of research.

The researcher can use a number of sampling procedures—for example, purposive sampling, convenience sampling, and snowball sampling. All the sampling methods presented here rely on prescribed selection criteria. They all use small samples, but the sample can be supplemented during the research process.

Purposive sampling

Purposive sampling targets a particular group of people. The researcher decides early on which criteria should be used for sampling. These are based on the aim of the study and existing knowledge in the field. The participants are chosen on the basis of particular characteristics that will help the researcher to explore the research topic. This could refer to socio-economic characteristics (e.g. living below the poverty line), specific experiences (e.g. childhood abuse), occupation (e.g. nurse), or social roles (e.g. mother). All the features of relevance must be present in the sample. It may also be important that there is diversity within the sample—for example, in relation to age and gender.

Purposive sampling is useful in situations where the researcher needs to obtain a sample quickly to investigate an urgent problem, such as the introduction of a new rehabilitation scheme for people who have had strokes. A study like that could allow for a detailed picture of particular issues that may arise when using the rehabilitation scheme, and it can help to change features of the scheme before it is implemented more generally.

Purposive sampling may be the only option, if the desired population for the study is rare or difficult to locate—for example, if the researcher wants to study elderly women who are homeless, or illegal immigrants.

A problem with purposive sampling is that the sample may be biased. However, even though purposive sampling involves deliberate choices, it is not necessarily biased. It is believed that if the sampling process is based on objective criteria, and these are clearly documented and explained, the bias is limited.

Snowball sampling

This is a way of sampling which is used to get hold of participants without investing a lot of time and energy. The researcher simply asks participants in the study if they know other potential participants.

Snowball sampling can be used to locate hidden populations—for example, when people with the required characteristics are rare or hard to find—by having existing participants refer to new participants. If a researcher is studying homeless people, it is not possible to have a list of all the homeless people in an area, but if the researcher finds one or two, they may help to locate others.

The advantage of snowball sampling is that it is cost-efficient, because the researcher does not have to use expensive and time-consuming techniques to locate participants. The major limitationof the method is that it is very difficult to avoid bias in the sample. There are also confidentiality concerns, because the participants know the identity of other participants.

Convenience sampling

This method of sampling has already been introduced in Chapter 1.2, so this account will concentrate on issues related to qualitative research.

Convenience sampling selects a particular group of people who happen to be available. They are simply asked if they would like to participate. The researchers may want to study the effectiveness of a programme for the prevention of antisocial behaviour in a youth group, using basketball training and coaching. The researchers follow the adolescents for a year, to see the impact the programme has on the young people. The sample represents the young people who are in the programme, but could also represent similar young people in similar programmes around the country. In order to see if this is the case, however, similar research must confirm it.

Effects of participant expectations and researcher bias in qualitative research

One of the more important factors to consider in psychological research is that humans are not responding passively to research. Researchers need to be aware that research is an active process that requires reflection and interrogation of the data, the participant, and the research context, in order to avoid **participant expectations** (also called reactivity) or researcher bias. Participant expectations can be explained as the participants' ideas of the research and the researcher which can affect the trustworthiness of the data. If the participant feels they have to behave in certain ways in order to please the researcher, this will affect the value of the data in a negative way.

Researcher bias can be explained as the researcher not paying enough attention to the participants, so that it is the researcher's own beliefs that determine the research process. It is imperative in qualitative research that participants' perceptions and beliefs in understanding social processes must be given priority over the researcher's own.

If it is assumed that "reality" in a research study is multiple and co-constructed, then we should be aware that participants who are asked to comment on the researcher's interpretation of the data will not necessarily arrive at the same conclusions as the researcher.

Be a researcher

You have been asked to conduct a qualitative research study on football fans' perception of their favourite team.

- What sampling method would be appropriate? Why?
- Could another sampling method be considered? Why?
- What should you consider overall when selecting your sample?

Some would argue that a "credibility check" could impose an artificial conformity on the analysis of the data. This would impact on the meaningfulness of the findings. However, being aware of sources of bias is important. One way to minimize the effect of participant expectations and researcher bias is reflexivity throughout the research process.

Importance of credibility in qualitative research

According to Rolfe (2006), **credibility** corresponds roughly to the concept of internal validity that is used in quantitative research. Credibility is linked to the concept of "trustworthiness". **Trustworthiness** (i.e. credibility or validity) of research is established when the findings of the research reflect the meanings as they are described by the participants.

Some qualitative researchers (e.g. Sandelowski 1993) argue that issues of validity in qualitative studies should not be linked to truth or value, but rather to trustworthiness, which can be obtained if the researchers try to make their reflections and decisions in the research process transparent, so that they can be scrutinized. According to Sandelowski (1986), it means "leaving a decision trail, so that the reader would be able to track and verify the research process". There are no objective criteria for trustworthiness. A study is trustworthy if, and only if, the reader of the research report judges it to be so, according to Rolfe (2006).

Qualitative researchers could check whether their accounts are credible by referring to others' (e.g. participants, other researchers) interpretation of the data, or by applying other methods of analysis in relation to the same subject matter. According to Guba and Lincoln (1989), such peer reviews—or checks—are the single most critical technique for establishing credibility within each individual study.

Effect of triangulation on the credibility/trustworthiness of qualitative research

Triangulation can be defined as a kind of cross-checking of information and conclusions in research, brought about by the use of multiple procedures or sources. If there is agreement between the procedures or sources, there is support (or corroboration) of the interpretation of the data.

Triangulation involves the use of different perspectives, methods, and sources to check if the interpretation of data can be supported. There are different forms of triangulation.

- *Method triangulation* involves comparing data that come from the use of different methods. This could involve qualitative and quantitative methods.
- *Data triangulation* involves comparing data that come from data gathered from other participants or other sources, for example collected by different qualitative methods (e.g. observations and interviews).

- *Researcher triangulation* involves the use of several observers, interviewers, or researchers to compare and check data collection and interpretation.
- *Theory triangulation* involves looking at the data using different theoretical perspectives.

Many qualitative researchers believe that triangulation can be useful in checking if the findings are trustworthy. Triangulation can provide a new way of looking at the same data, and it can add to credibility if it confirms the conclusions that have been drawn. However, Hammersley (1992) claims that it is not possible to know with certainty that an account is true, because there is no independent and completely reliable way to find "truth". The only way to get closer to the truth is to carefully examine all the evidence and see whether it supports the interpretation.

According to some researchers, it is important in qualitative research to establish a set of strategies, which can increase confidence that research findings actually represent the meanings presented by the participant—that is, increase trustworthiness. Triangulation can be one method used to do this. However, the most radical qualitative researchers argue that it is not possible to establish predetermined, distinct criteria for trustworthiness and credibility, because qualitative research is based on more or less subjective interpretations of the world.

Reflexivity in qualitative research

Reflexivity is a concept that has gained importance in qualitative research. Reflexivity is based on the assumption that it is important that the researcher is aware of his or her own contribution to the construction of meaning in the research process. Reflexivity is a process that occurs throughout the research. It allows the researcher to reflect on ways in which bias may occur, by acknowledging that his or her own background and beliefs can influence the way the research is conducted. This line of thinking argues that researchers should provide sufficient details about issues that may potentially bias the investigation—for example, revealing where they stand in terms of political ideology if this could be of importance.

According to Willig (2001), there are two types of reflexivity.

1 *Personal reflexivity*, which involves reflecting on the ways in which factors such as the researcher's values, beliefs, experiences, interests, and political commitment have influenced the research. It also involves thinking about how the research has affected the researcher personally and professionally.

2 *Epistemological reflexivity*, which has to do with thinking about the ways in which knowledge has been generated in the study. There are several ways to do this—for example, asking if the research question has limited what could possibly be found, if the design of the study and the way the data were analysed has biased the results, or if a different approach could have brought about a different understanding of the topic under investigation. Questions such as these encourage the researcher to think

critically about the knowledge that has been generated, as well as the assumptions which underpinned the research process.

However, qualitative researchers differ in the emphasis they place on reflexivity in their research, according to Willig (2001). Some consider both personal and epistemological reflexivity to be an integral part of the research report (e.g. Ritchie and Lewis 2003), while others acknowledge the importance of reflexivity, but do not include an in-depth discussion of it in their research reports.

Be a critical thinker

- Give two reasons for why reflexivity could be important in qualitative research.
- What is the main difference of this approach to the researcher's role in the natural sciences?