

Thinking Critically about Qualitative Research

Introduction to the Key Concepts

Students of modern psychology study a combination of quantitative and qualitative research. This chapter is devoted to some important key concepts in qualitative research: generalizing, participant expectations and researcher bias, credibility, and triangulation. These key concepts are in bold throughout the book as they are used frequently.

To What Extent Can Findings Be Generalized from Qualitative Studies?

Good examples of generalizing from qualitative studies are discussed in other sections of this book. One example is Ehrmin's (2002) observation study in Chapter 7. Chapter 8 also contains a discussion about generalizing from case studies.

Lewis and Ritchie (2003) divide generalizing from qualitative studies into three categories.

1. **Representational generalization**, generalizing outside the sample (related to external validity, specifically **population validity**)
2. **Inferential generalization**, generalizing outside the study conditions to other settings (related to external validity, specifically **ecological validity**)

3. **Theoretical generalization**, the extent to which the concepts used within a study explain a wider range of social behavior

Let's look at them one at a time.

The concept "representational" has a strict statistical meaning in quantitative research. Sampling in qualitative studies is not statistical. Rather, "representation is not a statistical match but one of inclusivity" (Lewis & Ritchie, 2003, p. 269). Rather than use the word *representative*, perhaps we should call it **symbolic representation**. High-quality qualitative study samples are selected in such a way that the sample includes a range of views from a larger population. For example, Becker, Burwell, Gilman, Herzog, and Hamburg (2002) selected a **purposive sample** from a larger group of girls who filled out the EAT-26 questionnaire (reviewed in Chapter 6). This sample was specifically selected to include a range of opinion and circumstance and was a much better choice than opportunity sampling would have yielded. Becker and colleagues' purposive sample was symbolic of the larger group of Fijian adolescent girls, although not statistically representative of the larger group.

But sometimes researchers warn that generalizing outside the sample is not advised. For example, Hargreaves and Tiggermann (2006) said that the sample in their study of male body image (reviewed in Chapter 6) was too narrowly defined for generalizing.

A researcher increases the inferential generalization of a study by providing **thick descriptions** (a term first coined by Clifford Geertz in 1979) of the study setting, the observations, and participant responses (Lewis & Ritchie, 2003). Thick descriptions help a reader consider the extent to which the conditions of data collection are similar to those in other settings. Ehrmin (2002) devoted a lot of space in her research report to describing details about the transitional house and the circumstances of participants in her observation/interview study of women recovering from addictions. The report is thick with descriptions that allow a reader to imagine how women living in transitional homes in similar contexts might have similar outcomes.

Lewis and Ritchie (2003) believe that qualitative studies have something valuable to contribute to theories about human behavior (increasing theoretical generalization) specifically *because* they investigate the rich contexts of human experience. For example, biological psychologists are learning more about how the brain behaves when an addict relapses. But studies such as Ehrmin's (2002) emphasize that we must understand the social context of a person with an addiction to account for all the variables involved in recovery. Just make sure that **data triangulation** is included in judging the extent to which a study has theoretical generalization. The results of

any one study should be checked against the results of other studies on a similar topic.

In addition to Lewis and Ritchie's (2003) three categories of generalizing, it is important to also consider the **reliability** and **validity** of studies when generalizing findings from qualitative studies (reliability and validity in quantitative research are also discussed in Chapter 9).

Lewis and Ritchie (2003) observe that reliability and validity in qualitative studies involve two factors.

1. Are the same meanings assigned to experience in one context also assigned in other research investigating the same topic in another context? Rather than expecting strict replication, qualitative researchers consider the **trustworthiness** of a study. Can we trust that experiences are fairly similar from one context to another?
2. How does the researcher interpret data? Researcher interpretations are an internal validity concern. Internal validity is increased through **reflexivity**, whereby all procedures are clearly outlined with **thick descriptions** and a researcher's personal involvement is detailed. Reflexivity "enables readers imaginatively to replicate studies" (Lewis & Ritchie, 2003, p. 271), increasing the generalizability of qualitative studies.

Let's use observation research to illustrate how to *increase* the reliability and validity of qualitative research.

Neuman (2006) writes that **reliability** means having both internal and external consistency. Internal consistency means that the interpretations make sense, given what is known about the sampled data. External consistency means verifying interpretations by checking and cross-checking with other sources and researchers. Reliability of observed data depends on a number of factors, such as the researcher's awareness of the subjectivity and context of the observations that may interfere with reliability. These must be acknowledged and considered in making interpretations. For example, data from group members are always influenced by context, so good researchers recognize that someone may say one thing in public and behave differently in private. Misinformation and even lies from participants must be considered. It is important to sample different angles of the research site to get a clear picture, such as a variety of locations, a variety of people, and a variety of contexts.

Neuman admits that it is almost impossible to replicate field observation research. However, validity can be increased with careful interpretation. First, ask to what extent the observed events are undisturbed by the presence of the researcher. Second, get some **member validation**—that is, ask key participants whether the observed data are accurate. If participants agree

that the selected data represent their real-life experiences and agree with interpretations, validity is increased.

Finally, the **credibility** of qualitative studies is increased through **reflexivity**, anything done to increase the **generalizability** of studies, and **triangulation**.

Explain Effects of Participant Expectations and Researcher Bias in Qualitative Research

Participant expectations and researcher bias are also addressed in many other parts of this book. Chapter 6 contains a discussion of these concepts in the section about considerations before, during, and after interviews. Chapter 7 contains a discussion of these concepts in the section about setting up and carrying out observation research. Chapter 8 contains a discussion of these concepts in the section about evaluating case studies.

Participant expectations and **researcher bias** are familiar terms from quantitative research. Both are also potential challenges for qualitative studies and require special consideration.

Because the purpose of qualitative research is to discover the richness and complexities of real-life situations, the researcher's role is more subjective. Greater subjectivity might increase researcher bias. For example, interviewers using a semistructured approach might have a general list of topics to ask about but are open to the direction taken by the participant. Interviewers frequently use their intuition to probe participants for more detailed information and context. Because of this more subjective role, researchers should include a detailed statement of **reflexivity**.

Participant expectations should be considered in the planning stages of any study. Although qualitative studies are meant to be more subjective, at what point do participant expectations interfere with gathering credible data? For example, researchers writing interview questions should consider the extent to which any question might trigger **demand characteristics**. Researchers must write questions that invite genuine responses without making participants feel that they must give a particular type of answer. Researcher bias can be reduced in observation studies with, for example, the use of **thick descriptions**. Thick descriptions are very detailed descriptions that aid the reader in understanding exactly what happened at the research

site. Chapter 7 includes two examples. First, Ehrmin's (2002) study contains detailed descriptions of data collection. Alexander, Miller, and Hengst (2001) took special care to minimize researcher bias in their diary-observation study.

One way to minimize participant expectations in observation research is to conduct a covert observation study, such as Rosenhan's (1973). However, the use of covert observation comes with special ethical considerations (see Chapter 3).

Explain the Importance of Credibility in Qualitative Research

Credibility is increased a number of ways:

1. Using reflexivity
2. Doing things that increase the generalizability of the study
3. Performing triangulation that is appropriate for qualitative research

In addition to these three, Willig (2001) outlines some things researchers can do to increase the quality of their studies.

1. Make sure that the categories generated in interpretation are a good fit with the data. The best way to show that the data are a good fit is to provide clear descriptions of the process (**thick descriptions**).
2. Make sure to clearly describe the life circumstances of the sample.
3. Make sure that interpretations are checked against those of others or stand up to data analysis using other methods.
4. Explore the extent to which the study results are transferable to other people and contexts.

Robert Yin (2009) adds one more thing. An analysis should identify all rival interpretations for the data and show how they are not plausible.

Credibility comes up frequently throughout this book. The example studies include some discussions of increasing credibility. For example, Alexander and colleagues (2001) increased the credibility of their study by ensuring the reliability between the parent observers and the researchers (reviewed in Chapter 7). Credibility is also addressed in Chapter 3; creating a partnership with participants can increase a study's credibility, especially if the

observed sample also agrees with the interpretations. A last example is discussed in Chapter 7 in the section about setting up and carrying out observation research.

Explain the Effect of Triangulation on the Credibility/Trustworthiness of Qualitative Research

Triangulation is important for qualitative studies, but we must be careful not to apply the exact same standards for triangulation in quantitative research. This material on triangulation for qualitative studies is also relevant for considering the **credibility** and **generalizability** of qualitative research.

There is some disagreement about using triangulation in qualitative studies. Let's first look at some reasons why some researchers caution against a strict requirement that triangulation be used to validate qualitative research. Then we can try to figure out a defensible argument about how we might apply triangulation to qualitative studies.

Some qualitative researchers argue that triangulation is not a very useful concept (Ritchie, 2003). Two key points about the nature of knowledge drive this view:

1. There is no single reality, and it is pointless to combine viewpoints under the banner of triangulation.
2. Each individual research method has its own purpose. The knowledge gained through one research method is not similar to the knowledge gained through other methods. Researchers using qualitative methods are trying to understand unique meaning systems.

These are valid points. So is there any way to make the concept of triangulation useful for qualitative studies?

Perhaps the best way to make triangulation useful is to think of it as serving an entirely different purpose. *Some believe the real value of triangulation for qualitative research is not in creating more certainty, as it is for quantitative research, but in giving the results of qualitative research more depth, an extension of the results.* With this in mind, let's look at how triangulation is appropriately applied to extending the depth of qualitative research.

Jane Lewis and Jane Ritchie (2003) and Robert Yin (2009) write that the following types of triangulation increase one's confidence in data gathered with qualitative methods.

1. **Method triangulation**
2. **Data triangulation**, the collection of data from different sources
3. **Multiple analyses in triangulation**—different observers and interviewers compare data collection and interpretation
4. **Theory triangulation**
5. **Member, or respondent, triangulation**—researchers check with the participants to make sure that their interpretations are consistent with what participants meant in the original responses

Let's use **case studies** as an example of how triangulation for qualitative research is applied. Yin (2009) says that **data triangulation** increases the strength of case studies. In addition, the need to use multiple sources in case studies is much greater than it is in other kinds of research.

The nature of case studies is to paint a rich picture of behavior. Richness implies that researchers examine multiple data sources. For example, Yin says that documents, archival records, open-ended interviews, observations, interviews, and surveys can shed different light on the topic of case studies. If these sources *converge*, or have similar findings, then researchers have a high degree of triangulation for their interpretations, far more evidence than using data from just one source. The use of multiple sources increases the **credibility** of a case study and gives the researcher more confidence in **generalizing**.

But keep in mind that using multiple sources is a lot of work for the researcher. Studies using more than one source take more time to complete and are more expensive. In addition, case study researchers must be knowledgeable about a variety of research methods, so their training must be extensive.

Think about some examples where data triangulation is possible. One is writing a case study about relationships between senior management and the employees in an organization. Observation, surveys of all employees, individual interviews with key staff, and focus group interviews with key staff can all be used to gather data about the company. Organizational psychology makes frequent use of case studies.

Chapter 8 contains two case studies that illustrate the benefits of data triangulation. Ma (2008) used data from many families—a multiple-case design. Cohen, Tenenbaum, and English (2006) also used data from multiple cases; in addition, they used interviews, questionnaires, and observations to collect data.

Explain Reflexivity in Qualitative Research

Reflexivity means that researchers are aware that their own biases and feelings affect the construction of meanings throughout the research process and acknowledge that it is impossible to remain objective while conducting research (Nightingale & Cromby, 1999). Researchers know that they impact both data collection and analysis. Willig (2001) identifies two kinds of reflexivity, **personal reflexivity** and **epistemological reflexivity**. Personal reflexivity means that researchers reflect on the way their values, experiences, political beliefs, and social identities influence the study. Epistemological reflexivity means that researchers have considered their assumptions about the nature of the world and the nature of knowledge that relates to a study.

Quantitative research is low in reflexivity. Researchers conducting experiments, for example, want an objective role; studies are designed so that the researcher has little impact on participant behavior and data analysis.

In contrast, qualitative research is high in reflexivity. For example, Ehrmin (2002) includes a detailed reflexive statement in her observation study on women recovering from addictions. Ehrmin writes that "criteria for evaluation of qualitative research were used to assure trustworthiness of the data, including . . . confirmability, established through the use of a reflexive journal demonstrating underlying processes, philosophical orientation, and the decision-making process in determining codes, categories, and themes" (p. 783). Ehrmin's journal helps others to replicate her study as much as possible.

Material from other sections of this book is also relevant to this discussion. Reflexivity aids in generalizing from research (also in this chapter) and is part of distinguishing between qualitative and quantitative research (Chapter 1).