

4

Qualitative or Quantitative Research? Where Do I Begin?

Chapter Summary

This chapter examines the basic differences between **qualitative** and **quantitative research** while at the same time suggesting how the two can be integrated. Qualitative researchers find out “what is going on here” from the point of view of those being researched. The goal of quantitative research is to provide numerical results that can be reported in tables and graphs. A guiding principle of all good research is to let the research question determine the data collection strategy. In other words, it is important to ensure that the methodology used the best answers the research questions posed.

Deciding whether to use qualitative or quantitative depends on what the researcher wants to know—the research question. Quantitative approaches typically involve large-scale numerical data from a smaller sample size and answer the following questions: How many? How often? What proportion? Qualitative research typically provides descriptive data from a smaller sample size. For example, what is happening in a group, in a conversation, or in a community—who spoke to whom, with what message, with what feelings, with what effect.

Qualitative research sets out to provide an impression: to tell what kinds of “something” there are; to tell what it is like to be, do, or think something. Qualitative research is unique in its approach to the study of human nature and generally uses an **inductive approach**. Research participants are encouraged to tell what is important to them, tell their stories, and to describe their perceptions and their feelings. The idea that individuals have voice and that their stories should be central to understanding a social issue is called **phenomenologism**. There is also no single unified truth. Qualitative techniques include interviews (structured, semi-structured, or unstructured), focus groups, participant observations, content analysis, and photovoice.

Quantitative researchers feel that the social sciences should adopt scientific methods to mirror the kind of research conducted in the natural sciences. Quantitative research sets out to find numerical results that can be reported in tables and graphs. It answers questions about situations in terms of “how many?” or “what proportion?” Quantitative methodology encompasses a **positivist approach** and employs a **deductive approach**. Positivists believe that there are real and truthful answers to any social questions. Using scientific methods such as statistical modelling, researchers can better understand and distinguish between causes and effects. Since quantitative research is concerned with **generalizing** the results to a larger population and does not involve asking everyone for their opin-

ion, samples must be selected using random means. Quantitative research cannot give in-depth information about a social problem, but will provide data on general trends and patterns. Quantitative methods can involve structured interviews, surveys, and questionnaires to name a few.

Inductive reasoning is an approach to research that tries not to make assumptions about the answer to the research question. Deductive research is more connected to theory and past research from the beginning. In this approach, previous research is used to inform the new research endeavors.

Based on similarities, researchers often combine methodologies consistent with qualitative and quantitative research design. Drawing an absolute line between qualitative and quantitative research projects is never satisfactory. Mixed methods research combines qualitative and quantitative research, which allows for a more fulsome answer to the research questions. It also provides different sets of data and levels of detail. Sometimes quantitative options will be used at one phase and qualitative at the another. Sometimes researchers apply qualitative methods as a preliminary to quantitative research. It is possible to collect qualitative data and to subject them to quantitative analysis, just as it is possible to collect quantitative data in a way that makes it possible for them to be analyzed qualitatively. The difference between qualitative and quantitative research is not a matter of “better” or “worse” but rather appropriateness to the question being asked. Despite the benefits of mixed method approaches, it can be very difficult, costly, and time-consuming research to engage in.

Key Terms

Bracketing A way of thinking that helps researchers separate their own experiences and opinions from those of the people they are studying. When a researcher is interviewing or writing about others, it is important to keep one’s thoughts and opinions separate from what the participants say. Your job as a researcher is to share participants’ experiences and not obscure the research with your own biases. (p. 62)

Content analysis A data collection strategy that uses written or archived information. Content may include reports, books, newspaper articles, diaries, autobiographies, or song lyrics—anything that is written down. (pp. 57-58)

Deductive approach Research organized from the “top down.” The research question, hypothesis, theoretical orientation, sample size, and so on are developed prior to the collection of data. Deductive approaches rely heavily on the findings of previous studies to build on existing knowledge; the attempt is to replicate studies as further evidence that supports or refutes previous research. Deductive approaches are a mainstay of quantitative research methods (p. 61)

Field notes When engaging in participant observation, field notes are a notebook or electronic file of observations, impressions, etc. (p. 57)

Focus groups A type of group interview, guided by one or two facilitators, where 12 to 14 participants with similar characteristics meet and discuss issues related to the researcher’s topic of interest. (p. 53)

Generalization The ability of the research to be used to explain beyond the scope of the research sample (p. 64)

Inductive approach A “bottom up” qualitative research approach. Theory building and explanations take place during and after data collection. Inductive approaches start with observations from real-life settings and then use this data to create new theories. (p. 57)

Participation observation/Ethnography A type of qualitative methodology where the researcher observes activities within a group or social setting. The researcher does not become a member of the group but has to be accepted and authorized in order to collect information. (p. 57)

Phenomenologism The idea that individuals have “voice” and that their stories should be central to understanding a social issue. (p. 56)

Photovoice A new method of collecting data where participants are given cameras or are asked to provide their own photos, and asked via interviews, diaries, logs, or other methods of data collection to describe their thoughts and feelings about the photos they take. (p. 58)

Positivist approach Employing scientific methods based on mathematical modeling and cause and effect relationships, positivists believe that there are real and truthful answers to all social questions. According to positivists, the fundamental purpose of research is to uncover facts and truths. (p. 59)

Primary research The act of collecting new data. These are data that have not existed in other forms prior to the research. (p. 65)

Qualitative research Qualitative researchers find out “what is going on here” from the perspective of those who are in the situation of being researched. (pp. 55–58)

Quantitative research Quantitative research sets out to give numerical results that can be reported in tables and graphs. (pp. 58–61)

Secondary research The act of conducting research by using available data. Examples include analyzing administrative or government records; performing a statistical analysis of someone else’s publicly available data; or combining data into a new dataset. In secondary research, the researcher does not do any additional data collection. (p. 65)

Semi-structured interview A type of qualitative research design that consists of a semi-directed conversation between the interviewer and participant. The interviewer has an interview guide consisting of a small list of questions or topics that must be discussed during the interview. The order of the topics is dependent on how the conversation between the interviewer and participant flows. The interviewer’s job is to ensure that all the relevant topics have been discussed and to probe for information resulting in new topics that are mentioned by the interviewee. (p. 53)

Structured interview A form of quantitative interviewing where the researcher asks a series of questions from a list. The questions must be asked in the order in which they appear on the list and the researcher must ask the questions exactly as worded. The idea is to provide the same research conditions for all participants, regardless of who interviews them. (p. 57)

Unstructured interview A type of qualitative interview that lacks a questionnaire. Researchers enter the interview with no pre-recorded questions or preconceived notions about how the participant might respond. Instead, the goal here is to introduce the topic of study and encourage the participant to use her or his words and ideas as much as possible. The role of the interviewer is to encourage the participant to share their thoughts and to ask for clarification when necessary. Interviewers are given an interview guide, a list of topics that must be discussed in the interview. Participants are encouraged to speak freely about subjects of interest as a way of reducing researcher bias that creeps into directed questions. In this way, researchers hope to obtain a more authentic version of events or more legitimate observations by participants in their own words. This form of interviewing gives participants the most power to determine the content of the final product. (p. 57)

Triangulation A method of combining the results of two or more methods. In this approach, a researcher tries to answer a research question using multiple methods. Each method provides different information that helps provide a more complete answer to the research question. (p. 66)

Study Questions

Scroll down for answers.

1. What differentiates qualitative research from the positivist approach?
2. How can researchers combine qualitative and quantitative approaches?
3. How do qualitative and quantitative research approaches deal with the issue of sampling?
4. In what ways do quantitative researchers try to emulate a positivist approach?
5. What are the basic features of phenomenology?
6. What is triangulation?
7. How is deductive reasoning linked to quantitative research?
8. Is inductive reasoning linked with qualitative research? Why or why not?
9. When is it appropriate to use primary data collection methods? When is it appropriate to use secondary data to answer a research question?
10. What are the difficulties in conducting mixed methods research?

Video Resource

Carles, Pierre. 2002. Sociology is a Martial Art (La Sociologie Est Un Sport De Combat) [14:04]

In the video below—the first 15 minutes of a feature-length documentary about the late sociologist Pierre Bourdieu—we get a glimpse of the intersection of research and politics, and thus an opportunity to think about objectivity, bias, and the purpose of social research in particular. In the first few minutes, Bourdieu is cornered by a fan who notes how he has changed her life. In the latter half, Bourdieu does an interview on radio, and is pressed to assess whether some of the social processes his research has explained are good or bad. His response, that sociology “doesn’t have to take a stand” provides an invitation for students to consider the impact of social research on society, and the tricky position this puts researchers in vis-à-vis the desire to control their findings and theories and the desire to remain “detached” and objective.

<https://www.dailymotion.com/video/x4kbr06>

Answers to Study Questions

1. Positivists believe that there are real and truthful answers to any social questions and that social researchers are capable of uncovering these facts and truths by measuring the attitudes, beliefs, and experiences of as many people as possible for the purpose of finding generalized trends and patterns. Qualitative researchers do not assume that the “truth is out there” but instead give more priority to individual truths, or truths from the perspective of the person or group being observed—truth is shaped by individuals in terms of how they make sense of the world around them. (pp. 59, 61)
2. Qualitative approaches are useful for exploring and understanding an issue about which the researcher may have little or no knowledge. Sometimes it is necessary to observe a setting or group in order to have some idea of what the research question should be. Once a researcher has some idea of what is at stake, he or she is in a better position to specify a research question containing a conceptual relationship between two concepts. (pp. 64, 66)
3. Sample sizes are much larger in quantitative research than they are in qualitative research. Quantitative research assumes that information and data drawn from a sample can be generalized to, or be representative of, a larger population whereas qualitative research does not prioritize the size of the sample so much as they place a higher priority on the quality of responses. (p. 56)
4. Quantitative researchers try to emulate a positivist approach in the following ways:
 - Quantitative researchers try to explain general trends and patterns in terms of cause and effect relationships.
 - Quantitative researchers believe that social life can be understood much in the same way as natural scientists understand the laws of nature.
 - Quantitative researchers rely on the scientific method.
 - Quantitative researchers believe that facts and truths can be made know via rigorous application of the research process. (p. 59)
5. The basic features of phenomenology are listed below:
 - assumes that people have a “voice”
 - stresses the point of view of the individual
 - emphasizes stories as opposed to explanations
 - prioritizes inductive understanding over deductive explanations (pp. 56–57)
6. Triangulation is a method of combining the results of two or more methods. In this approach, a researcher tries to answer a research question using multiple methods. Each method provides different information that helps provide a more complete answer to the research question. (p. 66)
7. Quantitative researchers use the deductive approach. This approach organizes research from the top-down, which means this type of research design relies heavily on the findings of previous studies as a guide to build on our existing knowledge. It also relies on extensive academic literature to identify theoretical frameworks. (p. 61)

8. Qualitative research is about phenomenology and giving voice to participants. In inductive research, it is all about privileging the experiences, opinions, and ideas of the people involved in the problem. The idea is to allow them to speak freely and for the research to report their findings in a way that is unencumbered by the rules and expectations of deductive research. Inductive research is theory-generating where the data collected is used to develop theory. (p. 63)
9. Primary data collection (or collecting your own data) is the default option for research and is the type of data most people are familiar with. It is most appropriate to use this option when you need specific information to answer specific research questions. Not all research involves you going out and collecting your own data. Many very successful research projects use data that someone else has collected. Secondary data analysis is appropriate when the data you need to answer your research questions already exists. It will save time, frustration, and money. You may also find that the information that has already been collected is better than what you could collect on your own. (p. 65)
10. Mixed methods approaches are very expensive and very time-consuming. Rarely can researchers get the funds they need to collect the data using one method. As the time collecting data increases, so does its cost. Very few researchers are able to obtain the funds needed to conduct a good mixed methods study. In fact, obtaining funding to do mixed methods research is often beyond the ability of even the most experienced researchers. Combining the results can be difficult—often the results end up looking like two separate reports. (pp. 64, 66)