Pearson New International Edition

Social Research Methods:
Qualitative and Quantitative Approaches
W. Lawrence Neuman
Seventh Edition

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EXAMPLE BOX 2

Examples of Bad and Good Research Questions

BAD RESEARCH QUESTIONS

Not Empirically Testable, Nonscientific Questions

- Should abortion be legal?
- Is it right to have capital punishment?

General Topics, Not Research Questions

- Treatment of alcohol and drug abuse
- Sexuality and aging

Set of Variables, Not Questions

- Capital punishment and racial discrimination
- Urban decay and gangs

Too Vague, Ambiguous

- Do police affect delinquency?
- What can be done to prevent child abuse?

Need to Be Still More Specific

- Has the incidence of child abuse risen?
- How does poverty affect children?
- What problems do children who grow up in poverty experience that others do not?

GOOD RESEARCH QUESTIONS

Exploratory Questions

- Has the incidence of new forms of child abuse appeared in Wisconsin in the past 10 years?

Descriptive Questions

- Is child abuse, violent or sexual, more common in families that have experienced a divorce than in intact, never-divorced families?
- Are the children raised in impoverished households more likely to have medical, learning, and social-emotional adjustment difficulties than children who are not living in poverty?

Explanatory Questions

- Does the emotional instability created by experiencing a divorce increase the chances that divorced parents will physically abuse their children?
- Is a lack of sufficent funds for preventive treatment a major cause of more serious medical problems among children raised in families in poverty?

We also want to specify the **universe** to which we generalize answers to a research question. All research questions and studies apply to some category of people, organizations, or other units. The universe is the set of all units that the research question covers or to which we can generalize. For example, in Pager's (2007) study, his units were individuals, specifically young White and Black men. The universe to which we might generalize his findings includes all U.S. males in their twenties of these two racial categories.

As we refine a topic into a research question and design a study, we also need to consider practical limitations. Designing the perfect research project is an interesting academic exercise, but if we expect to carry out a study, practical limitations must shape its design. Major limitations include time, costs, access to resources, approval from authorities, ethical concerns, and expertise. If we have 10 hours a week for 5 weeks to conduct a research project but answering the research question will require 2 years, we must narrow the question to fit the practical limitations.

Time is always a consideration. However, it is very difficult to estimate the time required for a study. A specific research question, the research techniques used, the complexity of the study, and the amount and types of data we plan to collect all affect the amount of time required. Experienced researchers are the best source for getting good estimates of time requirements.

Cost is another limitation, and we cannot answer some research questions because of the great expense involved. For example, our research question asks whether sports fans develop strong positive feelings toward team mascots if the team has a winning season but negative feelings if it has

Universe The entire category or class of units that is covered or explained by a relationship or hypothesis.

TABLE 1 Quantitative Research versus Qualitative Research

QUANTITATIVE RESEARCH	QUALITATIVE RESEARCH
Researchers test hypotheses that are stated at the beginning.	Researchers capture and discover meaning once they become immersed in the data.
Concepts are in the form of distinct variables.	Concepts are in the form of themes, motifs, generalizations, and taxonomies.
Measures are systematically created before data collection and are standardized.	Measures are created in an ad hoc manner and are often specific to the individual setting or researcher.
Data are in the form of numbers from precise measurement.	Data are in the form of words and images from documents, observations, and transcripts.
Theory is largely causal and is deductive.	Theory can be causal or noncausal and is often inductive.
Procedures are standard, and replication is frequent.	Research procedures are particular, and replication is very rare.
Analysis proceeds by using statistics, tables, or charts and discussing how what they show relates to hypotheses.	Analysis proceeds by extracting themes or generalizations from evidence and organizing data to present a coherent, consistent picture.

a losing season. To examine the question for all sports teams across a nation across a decade would require a great investment of time and money. The focus could be narrowed to one sport (football), to sports played in college, and to student fans at just four colleges across three seasons. As with time, experienced researchers can help provide estimates of the cost to conduct a study.

Access to resources is a common limitation. Resources include expertise, special equipment, and information. For example, a research question about burglary rates and family income in many different nations is nearly impossible to answer. Data on burglary and income are not collected or available for many countries. Other questions require the approval of authorities (e.g., to see medical records) or involve violating basic ethical principles (e.g., lying to a person and endangering her or him). Our expertise or background as researchers is also a limitation. Answering some research questions involves the use of data collection techniques, statistical methods, knowledge of a foreign language, or skills we may not have. Unless we acquire the necessary training or can pay for another person's services, the research question may not be practical.

In sum, qualitative and quantitative studies share a great deal, but they differ on several design issues: logic, research path, mode of verification, and way to arrive at a research question (see Table 1). In addition, the research approaches speak different "languages" and emphasize distinct study design features, issues that we consider in the next section.

QUALITATIVE DESIGN ISSUES

The Language of Cases and Contexts

Most qualitative studies involve a language of cases and contexts, employ *bricolage* (discussed later in this chapter), examine social processes and cases in their social context, and study interpretations or meanings in specific socio-cultural settings. We examine social life from multiple points of view and explain how people construct identities. Only rarely do we use variables, test hypotheses, or create precise measures in the form of numbers.

Most qualitative studies build on the assumption that certain areas of social life are intrinsically

qualitative. For this reason, qualitative data are not imprecise or deficient but are very meaningful. Instead of trying to convert fluid, active social life into variables or numbers, we borrow ideas and viewpoints from the people we study and situate them in a fluid natural setting. Instead of variables, we examine motifs, themes, distinctions, and perspectives. Most often, our approach is inductive and relies on a form of *grounded theory*.

Qualitative data may appear to be soft, intangible, and elusive. This does not mean that we cannot capture them. We gather qualitative data by documenting real events, recording what actual people say (with words, gestures, and tone), observing specific behaviors, examining written documents, and studying visual images. These are specific, concrete aspects of the social world. As we closely scrutinize photos or videotapes of people or social events, we are looking at "hard" physical evidence.[10] The evidence is just as "hard" and physical as the numeric measures of attitudes, social pressure, intelligence, and the like found in a quantitative study.

Grounded Theory

In qualitative research, we may develop theory during the data collection process. This largely inductive method means that we are building theory from data or ground the theory in the data. Grounded theory adds flexibility and allows the data and theory to interact. This process also helps us remain open to the unexpected. We can change direction of study and even abandon the original research question in the middle of a project if we discover something new and exciting.[11]

We build theory by making comparisons. For example, we observe an event (e.g., a police officer confronting a speeding motorist who has stopped). We may ponder questions and look for similarities and differences. When watching a police officer, we ask: Does the police officer always radio in the car's license number before proceeding? After radioing the car's location, does the officer ask the motorist to get out of the car or some times casually walk up to the car and talk to the seated driver? When we intersperse data collection and theorizing, new theoretical questions may arise that suggest future observations. In this way, we tailor new data to answer theoretical questions that arose only from thinking about previous data.

In grounded theory, we build from specific observations to broader concepts that organize observational data and then continue to build principles or themes that connect the concepts. Compared to other ways of theorizing, grounded theory tends to be less abstract and closer to concrete observations or specific events. Building inductively from the data to theory creates strong data-theory linkages. However, this can be a weakness as well. It may make connecting concepts and principles across many diverse settings difficult, and it may slow the development of concepts that build toward creating general, abstract knowledge. To counteract this weakness, we become familiar with the concepts and theories developed in other studies to apply shared concepts when appropriate and to note any similarities and differences. In this way, we can establish cross-study interconnections and move toward generalized knowledge.

The Context Is Critical

In qualitative research, we usually emphasize the social context because the meaning of a social action, event, or statement greatly depends on the context in which it appears. If we strip social context from an event, social action, or conversation, it is easy to distort its meaning and alter its social significance.

Social context includes time context (when something occurs), spatial context (where something occurs), emotional context (the feelings regarding how something occurs), and socio-cultural context (the social situation and cultural milieu in which something occurs). For example, a social activity (a card game, sexual act, or disagreement) occurs late at night on the street in a low-income area of a large city, a setting for drug use, fear and anger, violent crime, and prostitution within a cultural milieu of extreme racial-economic inequality. The same activity occurs midday in the backyard of a large house in an affluent suburban neighborhood in a social setting of relaxation and leisure, surrounded by trust and emotional closeness, and within a

cultural milieu of established affluence and privilege. The context will significantly color the activity's meaning. With different contextual meanings, the same activity or behavior may have different consequences.

In a quantitative study, we rarely treat context as important. We often strip it away as being "messy" or just "noise" and instead concentrate on precise counts or numerical measures. Thus, what a qualitative study might treat as essential may be seen as irrelevant noise in a quantitative study. For example, if a quantitative study counts the number of votes across time or cultures, a qualitative researcher might consider what voting means in the context. He or she may treat the same behavior (e.g., voting for a presidential candidate) differently depending on the social context in which it occurs (see Example Box 3, Example of Importance of Context for Meaning).

Context goes beyond social events, behaviors, and statements to include physical objects. One handgun could be an art object, part of a recreational hobby, a key element in committing a violent crime, evidence of an irresponsible parent, a suicide facilitator, or a means of social peace and community protection, each depending on the context. Without including the surrounding context, we cannot assign meaning to an object.

EXAMPLE BOX 3

Example of the Importance of Context for Meaning

"Voting in a national election" has different meanings in different contexts:

1. *A one-party dictatorship with unopposed candidates, where people are required by law to vote.* The names of nonvoters are recorded by the police. Nonvoters are suspected of being antigovernment subversives. They face fines and possible job loss for not voting.
2. *A country in the midst of violent conflict between rebels and those in power.* Voting is dangerous because the armed soldiers on either side may shoot voters they suspect of opposing their side. The outcome of the vote will give power to one or the other group and dramatically restructure the society. Anyone over the age of 16 can vote.
3. *A context in which people choose between a dozen political parties of roughly equal power that represent very different values and policies.* Each party has a sizable organization with its own newspapers, social clubs, and neighborhood organizers. Election days are national holidays when no one has to work. A person votes by showing up with an identification card at any of many local voting locations. Voting itself is by secret ballot, and everyone over age 18 can vote.
4. *A context in which voting is conducted in public by White males over age 21 who have regular jobs.* Family, friends, and neighbors see how one another vote. Political parties do not offer distinct policies; instead, they are tied to ethnic or religious groups and are part of a person's ethnic-religious identity. Ethnic and religious group identities are very strong. They affect where one lives, where one works, whom one marries, and the like. Voting follows massive parades and week-long community events organized by ethnic and religious groups.
5. *A context in which one political party is very powerful and is challenged by one or two very small, weak alternatives.* The one party has held power for the past 60 years through corruption, bribery, and intimidation. It has the support of leaders throughout society (in religious organizations, educational institutions, businesses, unions, and the mass media). The jobs of anyone working in any government job (e.g., every police officer, post office clerk, schoolteacher, and garbage collector) depend on the political party staying in power.
6. *A context in which the choice is between two parties with little difference between them.* People select candidates primarily on the basis of television advertising. Candidates pay for advertising with donations by wealthy people or powerful organizations. Voting is a vague civic obligation that few people take seriously. Elections are held on a workday. In order to vote, a person must meet many requirements and register to vote several weeks in advance. Recent immigrants and anyone arrested for a crime are prohibited from voting.

Bricolage

A *bricoleur* is someone who has learned to be adept in diverse areas, can draw on a variety of sources, and makes do with whatever is at hand.[12] The **bricolage** technique involves working with one's hands and combining odds and ends in a practical, skilled, and inventive way to accomplish a task. A successful *bricoleur* possesses a deep knowledge of materials, a set of esoteric skills, and a capacity to combine or create flexibly. The typical *bricoleur* is often a highly inventive and skilled craftsperson, repairperson, or jack-of-all-trades.

A qualitative study draws on a variety of skills, materials, and approaches as needed. This usually happens when we are unable to anticipate the need for them. The process of mixing diverse source materials, applying disparate approaches, and assembling bits and pieces into a whole is analogous to the bricolage of a skilled craftsperson who is able to create or repair many things by using whatever is available at the time.

The Case and Process

We can divide all empirical social research into two groups: *case study* (with one or a few cases) or *cross-case* (comprising many cases).[13] Most qualitative studies use a "case-oriented approach [that] places cases, not variables, center stage" (Ragin, 1992a:5). Thus, we examine many aspects of a few cases. The intensive, in-depth study a handful of cases replaces the extensive, surface-level study of numerous cases as is typical in quantitative research. Often a case-oriented analysis emphasizes contingencies in "messy" natural settings (i.e., the co-occurrence of many specific factors and events in one place and at one time). Rather than precise measures of a huge number of cases, as is typical of quantitative research, we acquire in-depth of knowledge and an astute insight into a small number of cases.

The study of cases tends to produce complex explanations or interpretations in the form of an unfolding plot or a narrative story about particular people or specific events. This makes the passage of time integral to the explanation. Often the emphasis becomes the sequence of events: what occurred first, second, third, and so on. This focus on process helps to reveal how an issue evolves, a conflict emerges, or a social relationship develops.

Interpretation

To interpret means to assign significance or coherent meaning. In quantitative research, meaning comes from using numbers (e.g., percentages or statistical coefficients), and we explain how the numerical data relate to the hypotheses. Qualitative studies rarely include tables with numbers. The only visual presentations of data may be maps, photographs, or diagrams showing how ideas are related. We instead weave the data into discussions of the ideas' significance. The data are in the form of words, including quotes or descriptions of particular events. Any numerical information is supplementary to the textual evidence.

Qualitative studies give data meaning, translate them, or make them understandable. We begin with the point of view of the people we study and then find out how they see the world and define situations. We learn what events, behaviors, and activities mean for them. To begin qualitative interpretation, we first must learn the meanings of things for the people we are studying.[14]

People who create social activities and behavior have personal reasons or motives for what they do. This is **first-order interpretation**. As we discover and reconstruct this first-order interpretation, it becomes a **second-order interpretation** because we come from the outside to discover what has occurred. In a second-order interpretation, we elicit an underlying coherence or sense of meaning in the

Bricolage Improvisation by drawing on diverse materials that are lying about and using them in creative ways to accomplish a pragmatic task.

First-order interpretation Interpretations from the point of view of the people being studied.

Second-order interpretation Qualitative interpretations from the point of view of the researcher who conducted a study.

data. Meaning develops only in relation to a large set of other meanings, not in a vacuum. In a second-order interpretation, we place the human action being studied into a "stream of behavior" or events to which it is related: its context.

If we were to adopt a very strict interpretive approach, we might stop at a second-order interpretation, that is, once we understand the significance of the action for the people we study. Most qualitative researchers go further. They want to generalize or link the second-order interpretation to a theory or general knowledge. They move to a broad level of interpretation, or **third-order interpretation** by which they assign general theoretical significance to the data.

Because interpreting social meaning in context is often a major purpose and outcome of qualitative studies, keep in mind that the three steps or orders of interpretation help provide a way to organize the research process.

QUANTITATIVE DESIGN ISSUES

The Language of Variables and Hypotheses

Variation and Variables. Simply defined, a **variable** is a concept that varies. In quantitative research, we use a language of variables and relationships among variables.

Previously, we discussed two types of concepts: those that refer to a fixed phenomenon (e.g., the ideal type of bureaucracy) and those that vary in quantity, intensity, or amount (e.g., amount of education). Variables are this second type of concept and measures of the concepts.

A variable must have two or more values. Once we become aware of them, we see variables everywhere. For example, gender is a variable; it can take one of two values: male or female. Marital status is a variable; it can take the value of never married single, married, divorced, or widowed. Type of crime committed is a variable; it can take values of robbery, burglary, theft, murder, and so forth. Family income is a variable; it can take values from zero to billions of dollars. A person's attitude toward abortion is a variable; as a woman's basic right can range from strongly favoring legal abortion to strongly believing in the sanctity of fetal life.

A variable's values or categories are its **attributes**. It is easy to confuse variables with attributes. The confusion arises because one variable's attribute can itself be a separate variable in its own right with only a slight change in definition. This rests on a distinction between concepts that vary and the conditions within concepts that vary. For example, "male" is not a variable; it describes a category of gender. Male is an attribute of the variable gender, yet a related idea, degree of masculinity, is a variable. It describes the intensity or strength of attachment to a set of beliefs, orientations, and behaviors that are associated with the concept of masculine within a culture. Likewise, "married" is not a variable; it is an attribute of the variable marital status. Related ideas such as number of years married or depth of commitment to a marriage are variables. In a third example, "robbery" is not a variable; but an attribute of the variable type of crime. Number of robberies, robbery rate, amount taken during a robbery, and type of robbery are all variables because they vary or take on a range of values.

In quantitative research, we redefine all concepts into the language of variables. As the examples of variables and attributes illustrate, the redefinition often requires only a slight change in definition. Concepts are the building blocks of theory; they organize thinking about the social world. Clear concepts with careful definitions are essential in theory.

Third-order interpretation Qualitative interpretations made by the readers of a research report.

Variable A concept or its empirical measure that can take on multiple values.

Attributes The categories or levels of a variable.

Types of Variables. As we focus on causal relations among variables, we usually begin with an effect and then search for its cause(s). We can classify variables depending on their location in a causal relationship or chain of causality. The cause variable, or the force or condition that acts on something else,