

Components of a Research Project

LEARNING OBJECTIVES

1. Describe useful strategies to employ when searching for literature.
2. Describe why sociologists review prior literature and how they organize their literature reviews.
3. Identify the main sections contained in scholarly journal articles.
4. Identify and describe the major components researchers need to plan for when designing a research project.

In this section, we'll examine the most typical components that make up a research project, bringing in a few additional components to those we have already discussed. Keep in mind that our purpose at this stage is simply to provide a general overview of research design. The specifics of each of the following components will vary from project to project. Further, the stage of a project at which each of these components comes into play may vary. In later chapters, we will consider more specifically how these components work differently depending on the research method being employed.

Searching for Literature

Familiarizing yourself with research that has already been conducted on your topic is one of the first stages of conducting a research project and is crucial for coming up with a good research design. But where to start? How to start? In [Chapter 4 "Beginning a Research Project"](#), you learned about some of the most common databases that house information about published sociological research. As you search for literature, you may have to be fairly broad in your search for articles.

I'm guessing you may feel you've heard enough about electronic gadget addiction in this chapter, so let's consider a different example here. On my campus, much to the chagrin of a group of student smokers, smoking was recently banned. These students were so upset by the idea that they would no longer be allowed to smoke on university grounds that they staged several smoke-outs during which they gathered in populated areas around campus and enjoyed a puff or two together.

A student in my research methods class wanted to understand what motivated this group of students to engage in activism centered around what she perceived to be, in this age of smoke-free facilities, a relatively deviant act. Were the protesters otherwise politically active? How much effort and coordination had it taken to organize the smoke-outs? The student researcher began her research by attempting to familiarize herself with the literature on her topic. Yet her search in Sociological Abstracts for “college student activist smoke-outs,” yielded no results.

Concluding there was no prior research on her topic, she informed me that she would need an alternative assignment to the **annotated bibliography** I required since there was no literature for her to review. How do you suppose I responded to this news? What went wrong with this student's search for literature?

In her first attempt, the student had been too narrow in her search for articles. But did that mean she was off the hook for completing the annotated bibliography assignment? Absolutely not. Instead, she went back to Sociological Abstracts and searched again using different combinations of search terms. Rather than searching for "college student activist smoke-outs" she tried, among other sets of terms, "college student activism." This time her search yielded a great many articles. Of course, they were not focused on prosmoking activist efforts, but they were focused on her population of interest, college students, and on her broad topic of interest, activism. I suggested that reading articles on college student activism might give her some idea about what other researchers have found in terms of what motivates college students to become involved in activist efforts. I also suggested she could play around with her search terms and look for research on activism centered on other sorts of activities that are perceived by some as deviant, such as marijuana use or veganism. In other words, she needed to be broader in her search for articles.

While this student found success by broadening her search for articles, her reading of those articles needed to be narrower than her search. Once she identified a set of articles to review by searching broadly, it was time to remind herself of her specific research focus: college student activist smoke-outs. Keeping in mind her particular research interest while reviewing the literature gave her the chance to think about how the theories and findings covered in prior studies might or might not apply to her particular point of focus. For example, theories on what motivates activists to get involved might tell her something about the likely reasons the students *she* planned to study got involved. At the same time, those theories might not cover all the particulars of student participation in smoke-outs. Thinking about the different theories then gave the student the opportunity to focus her research plans and even to develop a few hypotheses about what she thought she was likely to find.

Reviewing the Literature

Developing an annotated bibliography is often one of the early steps that researchers take as they begin to familiarize themselves with prior research on their topic. A second step involves a literature review in which a researcher positions his or her work within the context of prior scholarly work in the area. A literature review addresses the following matters: What sorts of questions have other scholars asked about this topic? What do we already know about this topic? What questions remain? As the researcher answers these questions, he or she synthesizes what is contained in the literature, possibly organizing prior findings around themes that are relevant to his or her particular research focus.

I once advised an undergraduate student who conducted a research project on speciesism, the belief that some species are superior to or have more value and rights than others. Her research question was "Why and how do humans construct divisions between themselves and animals?" This student organized her review of literature

around the two parts of her research question: the why and the how. In the “why” section of her literature review, she described prior research that addressed questions of why humans are sometimes speciesist. She organized subsections around the three most common answers that were presented in the scholarly literature. She used the same structure in the “how” section of her literature review, arranging subsections around the answers posed in previous literature about *how* humans construct divisions between themselves and animals. This organizational scheme helped readers understand what we already know about the topic and what theories we rely on to help make sense of the topic. In addition, by also highlighting what we still don’t know, it helped the student set the stage for her own empirical research on the topic.

The preceding discussion about how to organize a review of scholarly literature assumes that we all know how to read scholarly literature. Yes, yes, I understand that you must know how to read. But reading scholarly articles can be a bit more challenging than reading a textbook. Here are a few pointers about how to do it successfully. First, it is important to understand the various sections that are typically contained in scholarly journals’ reports of empirical research. One of the most important and easiest to spot sections of a journal article is its **abstract**, the short paragraph at the beginning of an article that summarizes the author’s research question, methods used to answer the question, and key findings. The abstract may also give you some idea about the theoretical proclivities of the author. As a result, reading the abstract gives you both a framework for understanding the rest of the article and the punch line. It tells you what the author(s) found and whether the article is relevant to your area of inquiry.

After the abstract, most journal articles will contain the following sections (although exact section names are likely to vary): introduction, literature review, methodology, findings, and discussion. Of course, there will also be a list of references cited. Lists of references cited are a useful source for finding additional literature in an area. and there may be a few tables, figures, or appendices at the end of the article as well. While you should get into the habit of familiarizing yourself with articles you wish to cite *in their entirety*, there are strategic ways to read journal articles that can make them a little easier to digest. Once you have read the abstract and determined that this is an article you’d like to read in full, read through the discussion section at the end of the article next. Because your own review of literature is likely to emphasize findings from previous literature, you should make sure that you have a clear idea about what those findings are. Reading an article’s discussion section helps you understand what the author views as the study’s major findings and how the author perceives those findings to relate to other research.

As you read through the rest of the article, think about the elements of research design that we have covered in this chapter. What approach does the researcher take? Is the research exploratory, descriptive, or explanatory? Is it inductive or deductive? Idiographic or nomothetic? Qualitative or quantitative? What claims does the author make about causality? What are the author’s units of analysis and observation? Use what you have learned in this chapter about the promise and potential pitfalls associated with each of these research elements to help you responsibly read and understand the articles you review. Future chapters of this text will address other elements of journal articles, including choices about measurement, sampling, and research method. As you learn about these additional

items, you will increasingly gain more knowledge that you can apply as you read and critique the scholarly literature in your area of inquiry.

Additional Important Components

Thinking about the overarching goals of your research project and finding and reviewing the existing literature on your topic are two of the initial steps you'll take when designing a research project. Forming a clear research question, as discussed in [Chapter 4 "Beginning a Research Project"](#), is another crucial step. There are a number of other important research design components you'll need to consider, and we will discuss those here.

At the same time that you work to identify a clear research question, you will probably also think about the overarching goals of your research project. Will it be exploratory, descriptive, or explanatory? Will your approach be idiographic or nomothetic, inductive or deductive? How you design your project might also be determined in part by whether you aim for your research to have some direct application or if your goal is to contribute more generally to sociological knowledge about your topic. Next, think about what your units of analysis and units of observation will be. These will help you identify the key concepts you will study. Once you have identified those concepts, you'll need to decide how to define them, and how you'll *know* that you're observing them when it comes time to collect your data. Defining your concepts, and knowing them when you see them, has to do with conceptualization and operationalization, the focus of [Chapter 6 "Defining and Measuring Concepts"](#). Of course, you also need to know what approach you will take to collect your data. Thus identifying your research method is another important part of research design. You also need to think about who your research participants will be and what larger group(s) they may represent. These topics will be the focus of [Chapter 7 "Sampling"](#). Last, but certainly not least, you should consider any potential ethical concerns that could arise during the course of your research project. These concerns might come up during your data collection, but they might also arise when you get to the point of analyzing or sharing your research results.

Decisions about the various research components do not necessarily occur in sequential order. In fact, you may have to think about potential ethical concerns even before zeroing in on a specific research question. Similarly, the goal of being able to make generalizations about your population of interest could shape the decisions you make about your method of data collection. Putting it all together, the following list shows some of the major components you'll need to consider as you design your research project:

1. Research question
2. Literature review
3. Research strategy (idiographic or nomothetic, inductive or deductive)
4. Research goals (basic or applied)
5. Units of analysis and units of observation
6. Key concepts (conceptualization and operationalization)

7. Method of data collection
8. Research participants (sample and population)
9. Ethical concerns

KEY TAKEAWAYS

- When identifying and reading relevant literature, be broad in your search *for* articles, but be narrower in your reading *of* articles.
- Writing an annotated bibliography can be a helpful first step to familiarize yourself with prior research in your area of interest.
- Literature reviews summarize and synthesize prior research.
- Literature reviews are typically organized around substantive ideas that are relevant to one's research question rather than around individual studies or article authors.
- When designing a research project, be sure to think about, plan for, and identify a research question, a review of literature, a research strategy, research goals, units of analysis and units of observation, key concepts, method(s) of data collection, population and sample, and potential ethical concerns.