

3

Selecting a Problem

Chapter Summary

This chapter describes the skills involved in developing a general question or issue into a practical, focused, and answerable research statement. Phase 1 of the research process involves the selection and focusing of a research problem. The research process begins when our curiosity is aroused. There can be many starting points for a research project such as an observation, an important decision to be made, a news report, or a policy issue. A clear **statement of the problem** or the issue must guide the research.

Relating the research question and subsequent findings to the existing literature is an important first step in the research process. The literature review assists in identifying similar studies and contextualizing your problem with what has already been said and done. The literature review can also assist in the selection of theoretical approaches. The review of the literature is central to identifying factors (conceptualization) that will need to be considered in the research project. It is also important for embedding your findings within the larger research debates and in advancing knowledge on a particular issue. A good knowledge of the existing literature on a topic is essential to research planning and dissemination.

Identifying a theoretical framework is essential for all research projects. Theory connects to the research process through the research questions, the literature review, and in the interpretation of the results. Theory plays differing roles in qualitative and quantitative research. It is also essential to be aware of the theory's limitations.

The goal in this step of the research process is to produce a clear statement of the issues to be studied, by narrowing and clarifying the problem. A research problem must be clear and focused. It can be formulated as a researchable question in two ways: a hypothesis and a research objective. A conceptual or theoretical **hypothesis** is a statement that asserts a relationship between **concepts** and it may specify the direction of that relationship (positive or negative). An empirical hypothesis is a statement that asserts a relationship between two variables. Variables are features of concepts that can be empirically measured. Constructing a hypothesis requires the researcher to identify an independent concept and a dependent concept. **An independent concept** produces a change in, or acts on the dependent concept. A **dependent concept** is the thing that is caused, acted upon, or affect-

ed by the independent concept. Diagramming hypotheses is very useful to promote clear thinking and illustrating the relationship between concepts/variables.

Not all research is best guided by a hypothesis, particularly qualitative research. Sometimes it is not possible or desirable to specify the relationship between concepts before observations/data collection begins. A **research objective** (otherwise known as a research question) states the goal of a study. It is pertinent to qualitative research when the goal of the research is descriptive rather than explanatory. A statement of the objective or purpose of the research serves as a guide for the research process.

The research process may start from many points: curiosity, claims of others, readings, problems, etc. The most important step in a research project is to clarify the issue and narrow the focus.

Key Terms

Concept An idea that stands for something, or that represents a class of things or a general categorization of an impression of something. Concepts are categories or descriptions of our world and experience. (p. 41)

Conceptualization The definitions of independent and dependent concepts. The point in the research design where independent and dependent variables are identified and formulated in a systematic and rigorous manner. (p. 35)

Dependent variable/concept The concept that is acted upon, produced, or caused by the independent concept. (p. 45)

Hypothesis A statement that asserts a relationship between concepts or variables. (p. 41)

Independent variable/concept An independent concept causes, produces a change in, or acts upon something else. (p. 45)

Nominal variable/concept A concept that is rigidly divided into two or more exclusive categories. (p. 43)

Research objective The research objective is pertinent to qualitative research when the goal of the research is descriptive rather than explanatory; a statement of an objective can serve to guide the research. (p. 48)

Statement of problem A statement of a problem explicitly identifies the issues a researcher chooses to focus on. (p. 39)

Study Questions

Scroll down for answers.

1. Why might a concept may be independent in one case but not independent in another?
2. In what situation would a researcher formulate a research objective instead of a hypothesis?
3. How does a literature review help to narrow and clarify a research problem?
4. What features differentiate a nominal concept/variable from other concepts?
5. How can an observation, news report, or policy issue stimulate a research process?
6. What role do theories play in the development of a research question?
7. What are the similarities and differences between the role of theory in a qualitative versus a quantitative research project?
8. Why is conceptualization important to consider prior to collecting data?
9. Diagram the following hypothesis: “The greater the academic performance of a high school student, the more likely it is the student will intend to go to university.”
10. How might a researcher ask about the concept of gender identity in a way that allows for a multitude of responses?

Video Resource

The Homeless Hub. 2012. Does Housing First Work? [5:08]

In this video, sociologist Stephen Gaetz explains the Housing First approach and discusses early results of research that tests its effectiveness in reducing homelessness.

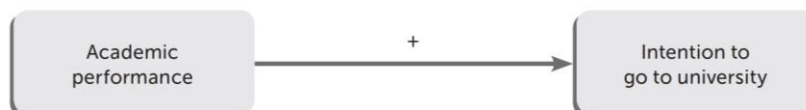
<https://vimeo.com/39425402>

Answers to Study Questions

1. Whether a concept is independent or dependent depends on the theory that the researcher wants to explore and on the direction of the hypothesized relationship. (pp. 46–47)
2. Qualitative research usually contains a research objective rather than an explicitly defined and formulated hypothesis. The intent of such qualitative research is to describe what is happening, not to test explanations of what happened. (pp. 48–49)
3. A literature review can help narrow and clarify a research problem in the following ways:
 - At the conceptualization stage, it can help in identifying and preparing a good research question.
 - It can help identify appropriate theoretical and research design approaches.
 - At the data analysis, it can help embed the findings within the larger research debates.
 - It can alert the researcher to the types of questions and issues that have and have not been asked.
 - It can help identify factors that the researcher may not otherwise have considered.
 - The literature review can help situate the findings and interpretations within the broader research issue. (pp. 35–36)
4. A nominal concept is one that only describes differences in terms of quality; it does not describe a difference or a change in terms of quantity (e.g., “more” or “less”). Nominal concepts contain categories or classifications based only on differences (e.g., the concept of gender usually comprises two genders: male and female). (p. 43)
5. An interesting observation from a personal point of view may result in the researcher developing a more formal set of research questions. A news report contains lots of facts about patterns in society but not much in the way of interpretation and analysis of these patterns. The questions and issues raised by policy issues are often excellent starting points for research questions. (pp. 33–35)
6. The nature of the question shapes our research project and implies/influences theory. (p. 36)
7. Qualitative: Theory plays a central role, requires that theories are more explanatory, that give us guidance about what kind of information we need and what data we need to answer the research question. Quantitative: Focuses on the extent of the problem, who is most affected by the problem, and how we might better understand the nature of the problem. This gives us a clue to which theory we select and how the theory is used in the project. (pp. 36-37)
8. It can assist in identifying and preparing a good research question, be helpful in identifying appropriate theoretical and research design approaches, and assist in defining central variables. (p. 35)
9. (p. 47)

The greater the academic performance of a high school student, the more likely it is that the student will intend to go to university.

This hypothesis would be diagrammed as follows:



10. We can ask “what is your gender affiliation?” Instead of forcing participants to select one of two binary options, we leave a blank line at the end of this question. This allows for people to answer using a category they are most comfortable with. (p. 44)