

Chapter 3

Answers to Study Questions

3.1. What sources of research ideas have been identified in this chapter?

Everyday life (e.g., your experiences with being the parent of a child in school), practical issues (e.g., the effectiveness of school vouchers), past research, (e.g., you may want to examine the conflicting research on the effect of retaining students and conduct a study that overcomes the weaknesses of these studies), theory (e.g., identify a key factor you believe is helpful in motivating students to study).

3.2. How would you get a research idea from each of these sources?

From everyday life, practical issues, past research, theory, by being inquisitive, and by asking questions. You may encounter an everyday experience that is odd or strange and a research question might arise because you want to find out why it is strange or odd. Similarly, you can get a research idea from a practical issue, from past research, or from a theory by trying to find out why some issue or phenomenon occurs or if a prediction made by a theory will turn out to be accurate

3.3. How do research ideas and questions differ from ideas and questions that cannot be empirically researched?

Ideas and questions that can be empirically researched are ones that can be examined and tested using real world data (e.g., observations, experiment, etc.). Those that cannot be empirically researched are ones that have to do with which values are “right” and what values are “wrong” in a moral sense in society. For example, research cannot answer the question of whether legalized abortion is morally right or wrong.

3.4. What is the purpose of conducting a review of the literature in a quantitative study?

A literature review will tell you whether the problem you have identified has been researched, give you ideas about how to proceed, assist you in designing the study, point out methodological problems you might encounter, and identify appropriate data collection instruments.

3.5. What is the purpose of conducting a review of the literature in a qualitative study?

A literature review in this case can help you generate the tentative or formative theoretical underpinnings of the study, assist in formulation of good starting point research question, selection of the study population, and stimulate new insights and concepts you may wish to investigate. Remember, however, that as you enter the field to collect qualitative data that you want to be open to anything that appears relevant. That is, the process of inductive investigation and analysis is very important in qualitative research.

3.6. What are the information sources you would use in conducting a literature review and what is the advantage of each?

Books, journals, dissertations, computer databases, and internet material that you have evaluated for its quality.

3.7. Why is ERIC such a valuable resource for educational researchers?

Because it includes all the entries for the Current Index to Journals in Education and Resources in Education.

3.8. What is the difference between directories, search engines, and meta-search engines?

Directories are web pages grouped by topics or categories. Search engines are computer software that searches and identifies web pages related to the search term you select. A meta-search engine is software that submits your search term to several different databases at the same time to try to develop a more complete search of relevant web pages

3.9. What are the advantages and disadvantages of using the public internet in conducting a literature search?

The disadvantages are the time required for a search and the potential lack of credibility or accuracy of the information received. The advantages are the wealth of information provided and its accessibility 24 hrs a day

3.10. How would you evaluate the validity of information obtained over the Internet?

By looking at the source of the information, the purpose of the web page, whether the information is traceable to factual information, whether there is some acknowledgement of the limitations of the information, the last date the web page was revised, and the appropriateness of the information for your purposes

3.11. What factors should you consider in determining whether it is possible for you to conduct a study?

The amount of time taken to conduct the study, the type of research participants needed, the expense of the study, the expertise required to conduct the study, the ethics of the study.

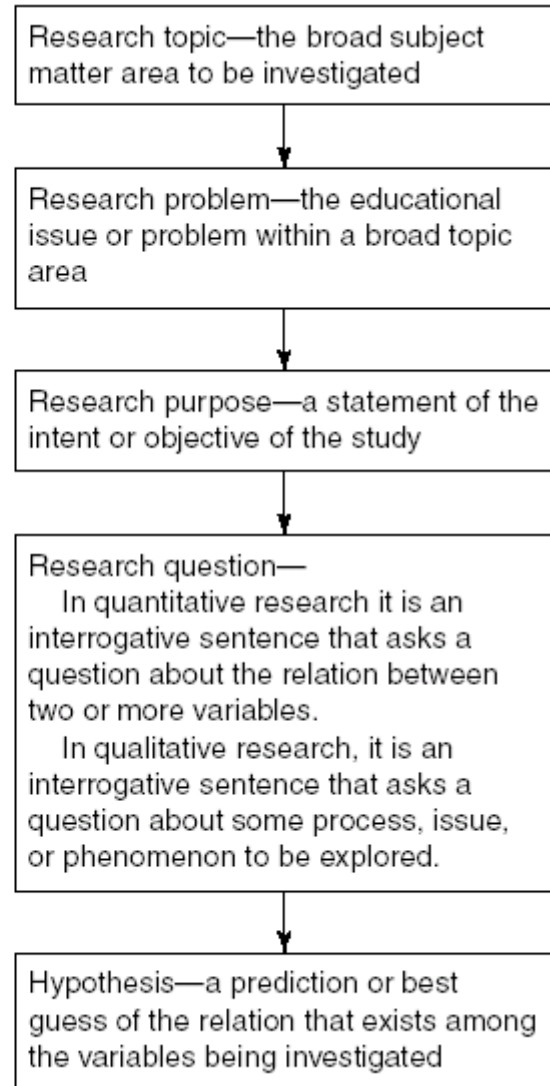
3.12. How do research problems in qualitative and quantitative research differ?

A quantitative research problem emphasizes the need to explain, predict, or describe something whereas a qualitative research problem focuses on exploring some process, event, or phenomenon.

Note: I am reproducing Figure 3.1 here because it shows the relationship between the topic, problem, purpose, question, and hypothesis. Basically, it is a process of becoming more specific.

■ FIGURE 3.1

Flowchart of the development of a research idea



3.13. How does the statement of the purpose of a study differ in qualitative and quantitative research?

A quantitative purpose statement identifies the type of relationship being investigated between a set of variables whereas a qualitative purpose statement focuses on exploring or understanding some phenomenon.

3.14. How do research questions differ in qualitative and quantitative research, and what is their purpose?

A quantitative research question is an interrogative sentence that asks a question about the relation that exists between two or more variables. Its purpose is to identify the variables being investigated and to specify the type of relationship, descriptive, predictive, or causal, being investigated. A qualitative research question asks a question about some process, issue, or phenomenon that is to be explored. Its purpose is to give focus to what is being investigated and to identify what is being explored.

3.15. Why should research questions in quantitative research be very specific?

Quantitative research questions should be very specific because a specific question helps insure that the researcher understands the variables being investigated and it aids in the design of the research study.

3.16. What is a hypothesis, and what is the one criterion that it must meet?

A hypothesis is a formal prediction of the relation that exists among the variables being investigated. It must be capable of being empirically tested (i.e., confirmed or refuted).

3.17. Why are hypotheses typically not formulated in qualitative research, and what is typically used instead?

Hypotheses are typically not formulated in qualitative research because qualitative research is conducted for description, exploration, and discovery. Instead of hypotheses, qualitative researchers pose research questions and some of these research questions even emerge as the study progresses. On the other hand, while a qualitative researcher is in the field, some hypotheses may be inductively generated and later tested.

Here are some additional study questions that publisher accidentally left out of the book. They should be included in your study.

3.18. What are the components of a research plan, and what is contained in each component?

- I. **Introduction** (it includes a statement of the topic, problem, prior literature, statement of the research purpose, the research questions, and any hypotheses).
- II. **Method** (it includes information on the research participants, the data collection instruments, the apparatus used, if any, in the research study, and the procedure followed in carrying out the study; it may also contain a section on research design).
- III. **Data Analysis** (it includes information on how you intend on organizing and analyzing the data that you collect).

3.19. What is a meta-analysis, and why is the conclusion reached in a meta-analysis study more valid than the conclusion reached in a single study?

A meta-analysis is a quantitative technique used to integrate and describe the results of a large number of quantitative research studies. It is helpful because it is based on a large number of studies rather than a single study. In other words, it provides the results of research replication.