

# Chapter 12

## Developing the Research Study: A Step-by-Step Approach

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### **ABSTRACT**

*This chapter serves as a guideline for outlining the core characteristics of qualitative, quantitative, or mixed methods research (MMR) and the various steps researchers undertake in order to conduct a research study. While the focus is on MMR, the steps are similar for any type of research methodology. The purpose is to create a framework assisting the researcher with an outline following the seven steps to conducting research. It is important to note that MMR is not a limiting form of research. Researchers need a mixed method research question and a mixed methods purpose statement for the research project. This chapter will also help explain why MMR is one of the best approaches in answering a research question. Finally, the chapter includes a suggestion to the importance of adding a visual diagram of the mixed methods research project into the research project and into the final report.*

### **INTRODUCTION**

The following sub-sections present criteria to be used when selecting each of the four mixed methods designs: Parallel Convergent, Sequential Explanatory, Sequential Exploratory, and Embedded.

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## **Parallel Convergent Mixed Method Design**

The parallel convergent mixed method design requires matching the design to the study's purpose and is best suited for group research work or when an individual researcher can collect only limited quantitative and qualitative data. This design is a good choice in the following cases: 1. Where there is limited time for data collection. 2. Collection of both data types is needed in one visit to the field. 3. The researcher feels that collection and analysis of both types of data would be of equal value in understanding the research problem. 4. When the researcher possesses expertise in both quantitative and qualitative methods of research or can manage extensive data collection and analysis.

## **Explanatory Mixed Method Design**

This design is most useful in the following situations: 1. When the researcher wants to assess trends and relationships with quantitative data but also needs to be able to explain the mechanism or reasons behind the resultant trends. 2. In cases when the researcher, or research question itself, is more quantitatively oriented or the researcher knows the important research constructs and has quantitative instruments to measure these constructs. 3. When the researcher can perform a second round of qualitative data collection or can conduct research in multiple phases. 4. When the researcher has limited resources. 5. The researcher develops new questions based on quantitative results and need qualitative data to answer these questions.

## **Sequential Exploratory Mixed Method Design**

The sequential exploratory mixed method design is most useful in the following types of studies: 1. Where the qualitative exploratory results are to be generalized, assessed, or tested for their applicability to a sample and a population. 2. When the researcher needs to develop an instrument when one is not available (first explore, then develop instrument). 3. When the researcher needs to develop a classification or typology for testing or the researcher wants to identify the most important variables to study quantitatively when these variables are not known. 4. In cases where the researcher identifies new emergent research questions based on qualitative results that requires quantitative data, exploratory mixed method design would be a good choice.

## **Embedded Mixed Method Design**

This design is an appropriate choice in the following situations: 1. For researchers investigating different questions requiring different types of data to enhance the

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