


Chapter 4

Research Methodology: Qualitative, Quantitative, and Mixed Methods

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ABSTRACT

This chapter offers doctoral scholars a nuanced and practical guide to understanding and selecting among qualitative, quantitative, and mixed methods research methodologies. Grounded in philosophical and epistemological reflections, the chapter first unpacks the foundational assumptions that shape how we approach the study of reality and knowledge. It then guides readers through the strengths and limitations of qualitative approaches that center meaning, context, and human experience, as well as quantitative approaches that seek to measure, generalize, and test hypotheses. The chapter also explores the integrative promise of mixed methods, where the convergence of both approaches creates richer, more layered insights. More than a methodological comparison, this chapter aims to help scholars align their research design with their questions, values, and practical realities. Drawing on lived examples, ethical dilemmas, and reflective prompts, it empowers researchers to choose methodologies that not only meet academic rigor but also honor the complexity of the phenomena they study.

INTRODUCTION

Every research journey begins with a question. But before we seek answers, we must understand how we are going to look for them—and that question, in itself, demands a great deal of reflection. For doctoral scholars, perhaps no decision is

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more fundamental, more defining, than the choice of methodology (Abutabenjeh & Jaradat, 2018). It is the invisible compass that guides every aspect of inquiry—from the framing of questions to the selection of tools, the shaping of analysis, and ultimately, the meaning we make of our findings. Yet, for many embarking on the dissertation process, this choice is also one of the most confusing and misunderstood. Terms like *qualitative*, *quantitative*, and *mixed methods* are often used casually, even interchangeably, in academic conversations (Baškarada & Koronios, 2018). But beneath these labels lie entire worldviews, assumptions about what counts as knowledge, and divergent ideas about how we come to understand reality. This chapter is not a checklist or a procedural manual. Rather, it is an invitation—to think deeply, critically, and honestly about how we as researchers relate to the world we are studying. It is a conversation about paradigms and purposes, about the delicate balance between objectivity and interpretation, about rigor and nuance. It is, in essence, a reflection on the philosophy of research practice. And for doctoral scholars, especially those standing at the threshold of their dissertation work, this reflection is not optional. It is foundational.

Qualitative, quantitative, and mixed methods each bring with them distinct traditions, tools, and truths (Grønmo, 2023). The qualitative tradition invites us to dwell in complexity, to listen carefully, to understand lived experiences in context. It is the methodology of stories, of open-ended questions, of depth over breadth. Quantitative research, in contrast, emphasizes measurement, precision, and patterns. It seeks to generalize findings across populations, to identify relationships between variables, to test theories through replicable results. Mixed methods, meanwhile, stands at the crossroads—a methodology that dares to believe in both numbers and narratives, that seeks to enrich one way of knowing by integrating another. Choosing among these approaches is not simply about selecting the method that is most “popular” in your field or the one that feels easiest to implement. It is about alignment. Methodological integrity comes from matching your research questions with your philosophical orientation, your ethical commitments, and your practical constraints (Levitt et al., 2021). A mismatch—say, using a statistical tool to answer a question rooted in human emotion—can lead not only to poor findings but to fundamentally flawed research. In contrast, a methodology that resonates with your values and intellectual curiosity can transform your dissertation from a burdensome requirement into a meaningful scholarly contribution.

Throughout this chapter, we will explore the distinctive characteristics of qualitative, quantitative, and mixed methods research, situating them within their broader epistemological frameworks. We will look at how each approach shapes the kinds of questions we ask, the data we collect, and the way we interpret our findings. We will also reflect on the ethical and practical dimensions of methodological design—from gaining access to participants, to handling sensitive data, to

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