Chapter 2 Moving from Tension to Texture: The Paradigmatic Roots of Mixed Methods Research

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ABSTRACT

Much like a jigsaw puzzle box top guides one in how to connect the pieces, an individual's research paradigm operates as a conscious or subconscious influence in conducting a research project. This chapter starts by making the argument for the critical role of research paradigms before moving into a thorough investigation of the paradigmatic origins of the qualitative-quantitative "debate." While mixed-methods research is often seen as the mediator in the dispute, the authors then articulate four broad ways in which mixed methods research addresses the paradigm divide at the heart of qualitative and quantitative research. The result is paradigmatically complex, but offers researchers flexibility as they seek to address their research question.

INTRODUCTION: WHY SHOULD I CARE ABOUT RESEARCH PARADIGMS?

Consider the question: What is the most important part of putting a puzzle together? The most obvious answers always come first – start with the corner pieces, followed by locating the edges, and then grouping pieces of similar color. While you may consider yourself in command of the puzzle, a neutral observer would note something quite different: that the placement of those corners, edges, and colors was dictated in part by the image on the cover of the box top. The importance of that box top was so implicit and inherent that most do not identify it as an essential answer to the initial question, even though it controls most of our actions. You may be thinking that a puzzle *could* still be completed without a

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box top. A *simple* puzzle, perhaps. But what of advanced puzzles? The infamous Ravensburger puzzle with 32,000 pieces? 3D puzzles that do not fit within the confines of corners and edges? Or the set of "Impossibles" puzzles that are borderless, have irregular edges, and come with five extra pieces? Our perception of what the puzzle looks like will always influence our work to complete it.

Not significantly different from a puzzle box top, a research paradigm is a significant force in how one considers and conducts research. Before answering questions regarding potential data collection methods, or research designs (methodologies) to govern those methods, one must first consult the theoretical perspectives at hand (Crotty, 1998). The broader research *gestalts* are not a new phenomenon, and have their origins in the ancient debates among the Sophists, Socrates, Plato, and Aristotle about what constituted the pursuit and meaning of knowledge (Johnson & Gray, 2010). In this sense, "mixed methods" is not about the simple merger of words and numbers; it is the process of potentially balancing seemingly opposing paradigms, or attempting to fuse them to create a new, coherent idea. The "how" of that process is the focus of this chapter, with an emphasis on comprehending the nature of research paradigms, their role in the qualitative-quantitative debate, and how the researcher understands their function in a mixed-methods project. To pursue mixed-methods research without this foundation is akin to constructing a puzzle with no box top; and without that framing image to guide your hands as they move about the top of the table, you're lost. And there is nothing worse than an incomplete puzzle.

TENSION: THE QUALITATIVE-QUANTITATIVE DEBATE AND THE PARADIGM DIVIDE

\ten(t)-shən\ noun ~ a state of latent hostility or opposition between individuals or groups

An examination of the tension inherent in the qualitative and quantitative debate first requires an understanding of the two terms in question. Both forms of research follow from an empirical process involving the standard collection, analysis, and interpretation of data (Leedy & Ormrod, 2010). But to describe their distinctions as a simple comparison between words (qualitative) and numbers (quantitative) is to over-generalize their fundamentally different ways of approaching the research process. Qualitative research involves emergent and inductive research designs, processes, and analyses that focus on the interpretation and meaning of phenomenon and/or participant experience in a natural setting. Conversely, quantitative research is a deductive and theory-driven approach focusing on strict measurement and control of variables within large samples and using analysis to identify statistical links among the data (Creswell, 2014; Ponterotto, 2005).

It is important note the terminology used above. The brief descriptions articulate qualitative and quantitative *research*, not qualitative and quantitative *methods*. The distinction in terminology is critical, for as Morgan (2007) questions, is the problem "simply about how we use methods, [or does is it concern] basic issues about the nature of research" (p. 48). Biesta (2010) helps clarify by arguing that the research process or design is not innately qualitative or quantitative, but that the kinds of data obtained by a preceding method are the focus of these terms. The answer to the question then is that the crux of the dispute centers not on various methods and the corresponding types of data, but instead on the nature of social science research all together. In this context, qualitative and quantitative are clusters and

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