

# Mixed Methods Research: What are the Key Issues to Consider?

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## ABSTRACT

Mixed methods research (MMR) is increasingly becoming a popular methodological approach in several fields due to the promise it holds for comprehensive understanding of complex problems being researched. However, researchers interested in MMR often lack reference to a guide that can explain the key issues pertaining to the paradigm wars influencing MMR, different objectives of MMR, choice of MMR designs, and articulation of research questions in MMR. This paper addresses that gap through providing a peek into these issues through illustrative examples. This brief introduction to MMR is meant to encourage readers to delve deeper into the MMR literature and make informed decisions in designing and implementing MMR studies.

## KEYWORDS

Mixed Methods, Paradigm, Research Designs, Research Questions

## INTRODUCTION

Mixed Methods research is a type of research where a single researcher or a team of researchers mixes the different elements of quantitative and qualitative research methods for the purpose of achieving greater breadth and depth of understanding of the topic being researched (Johnson, Onwuegbuzie, & Turner, 2007). It is very important to understand here that the word “method” implies more than just data collection methods. In addition to methods of data collection (e.g., surveys, interviews, observation etc.), the word “methods” in Mixed Methods includes “methods of research (e.g., experiments, ethnography), and related philosophical issues (e.g., ontology, epistemology, axiology)” (Johnson et al., 2007, p. 118). It is this realization that helps to distinguish multimethod research from mixed method research. The notion of multimethod research was first championed by Campbell and Fiske (1959) for the purpose of triangulation. They advocated using more than one data collection measure to ensure that the explained variance can be attributed to the phenomenon being studied and not to a particular measure being employed. This provides evidence for the validity of the results and helps to counteract the possibility that the results are only methodological artifacts.

While the practice of collecting more than one kind of data through multiple data collection measures provided the impetus for researchers to think about the merits of combining different data collection methods, the use of multiple measures of data collection alone is not sufficient to conduct Mixed Methods Research (MMR). To conduct MMR, researchers need to carefully consider where they are positioned in regards to the paradigm wars between positivism/post-positivism largely guiding

quantitative research and interpretivism largely guiding qualitative research, philosophical affiliation to pragmatism as an alternative to positivism/post-positivism and interpretivism, and the multitude of options for mixed methods research designs.

This paper will provide a brief peek into those considerations. First, I will present an account of how the paradigm wars between the quantitative and qualitative research camps have shaped the field of MMR and led to the evolution of alternative frameworks including pragmatism as the most common guiding approach or philosophy of MMR. Second, I will provide a discussion of the different purposes and reasons of conducting MMR leading to different types of MMR designs. Finally, I will conclude with explaining how to frame research questions in MMR.

## PARADIGM WARS AND MMR

Before I discuss the different paradigms guiding the quantitative and qualitative research streams and how they might or might not be in contention when it comes to MMR, it is important to first understand what we mean by the term “paradigm”. Broadly, paradigms can be defined as “shared belief systems that influence the kinds of knowledge researchers seek and how they interpret the evidence they collect” (Morgan, 2007, p. 50). A closer look though would reveal subtle differences in the ways in which the term “paradigm” has been understood and used to guide research. Morgan (2007) reviews four basic versions of the paradigm concept and explains how accepting one version over the other might persuade us to support the combination of paradigms and reject the assumption that paradigms guiding quantitative and qualitative research are fundamentally incompatible. Out of the four versions, the two that are most relevant to understanding the paradigm wars and its implications for MMR are: (1) paradigms as epistemological stances, and (2) paradigms as shared beliefs among members of a specialty area (Morgan, 2007).

The epistemological stance approach to paradigms has hugely influenced the debate about whether it is possible to merge quantitative and qualitative research methods (Morgan, 2007; Tashakkori & Teddlie, 2003). This approach considers paradigm to be “a deeper philosophical position relating to the nature of social phenomena and social structures” (Feilzer, 2010, p. 7). It includes ontological assumptions about the nature of reality, epistemological assumptions about the relationship between the researcher and the reality to be known, and methodological assumptions about the methods of generating knowledge about reality. This notion of paradigm got most traction in the debate on combining paradigms because the familiar triology of the concepts of ontology, epistemology, and methodology created by Guba and Lincoln (1988) was central to comparing the different paradigms with the most dominant paradigm of the time, positivism. As noted by Morgan (2007), the major advantage of this triology was that “it reduced positivism to the status of just one among a series of competing “paradigms” in social science methodology” (p. 59). Comparing and contrasting the paradigms in the interpretivist camp (e.g., constructivism, critical theory) with the dominant paradigm of positivism allowed the qualitative researchers to argue for the legitimacy of qualitative research which was essentially guided by the interpretivist paradigms. Unlike positivism that holds the ontological position that there is only one objective reality, the epistemological notion that researcher and the topic being researched are independent entities, and the methodological aim of measuring causal relationships between variables within a value-free framework, interpretivism espouses that reality is socially constructed and hence, there are multiple realities (ontology), researcher and the object of research are assumed to be interactively linked so that the findings are value-mediated (epistemology), and that a dialectical exchange between the researcher and the subjects is the primary means of inquiry (methodology).

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