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#### Editorial: Differing Perspectives on Mixed Methods Research John W. Creswell and Abbas Tashakkori

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What is This?

# **Differing Perspectives on Mixed Methods Research**

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In our first editorial, we mentioned how scholars define and conceptualize mixed methods. In the two following editorials, a core assumption in our discussions has been that the terms *qualitative, quantitative,* and *mixed "methods"* or "*approaches*" are used by scholars as proxies representing different meanings, concepts, or dimensions of the research process. Such meanings have included different worldviews (e.g., postpositivism, constructivism, transformative), types of questions (e.g., inductive, deductive, hybrids), types of data collection and analysis strategies (e.g., statistical, thematic analysis), types of mixing (e.g., at many stages in the process of research, at the analysis stage or interpretation stage), and inferences (e.g., meta-inferences, inferences within quantitative and qualitative strands). In response to these many meanings, some authors have begun to conceptualize domains of discussion (Creswell, 2007; Gilbert, 2006; Greene, 2006) about what constitutes mixed methods research.

In this editorial, we would like to expand conceptualizations on mixed methods by examining various perspectives that mixed methods scholars have taken when discussing and writing about this topic. We have identified four different (but not necessarily mutually exclusive) perspectives. The first is a method perspective, in which scholars view mixed methods as focused on the process and outcomes of using both qualitative and quantitative methods and types of data. The second is a methodology perspective, in which writers discuss mixed methods as a distinct methodology that integrates aspects of the process of research such as worldview, questions, methods, and inferences or conclusions. The third is a paradigm perspective, in which researchers discuss an overarching worldview or several worldviews that provide a philosophical foundation for mixed methods research. The final and fourth perspective is the practice perspective, in which scholars view mixed methods research as a means or set of procedures to use as they conduct their research designs, whether these designs are survey research, ethnography, or others. By reviewing these four perspectives, we hope to stress the importance of divergent views and discourses as the field of mixed methods research continues to develop (see Freshwater, 2007).

### **The Method Perspective**

Those who view and report mixed methods primarily as a method focus on developing and using strategies for collecting, analyzing, and interpreting multiple types of quantitative and qualitative data (e.g., Yin, 2006). Such data collection and analysis might be centered on two separate or related research questions that call for both quantitative and qualitative data. The method perspective perhaps has its genesis in the classic definition of mixed methods research of Greene, Caracelli, and Graham (1989), who defined mixed methods designs as "those that include at least one quantitative method (designed to collect numbers) and one qualitative method (designed to collect words)" (p. 256). When studies from a method perspective are presented in the literature, there is not much discussion about worldviews or paradigms, although there might be some implicit recognition of the assumptions of worldviews or paradigms. One often finds comments about the "mixing" of data, such as merging, connecting, or embedding, as found in different types of mixed methods designs (Creswell & Plano Clark, 2007). The article by Fetters et al. in this issue of *JMMR* on prenatal care for Japanese women during childbirth illustrates primarily a method perspective, with its emphasis on the types of data collected at different stages of research in response to their research questions (see the authors' Figure 1). The methods view is also reinforced by the review in this issue of the book by Rihoux and Grimm (2006) that highlights how to use quantitative tools for analyzing qualitative information from a small number of cases. The article in this issue by Lee and Greene might also be considered an example of this perspective. They integrated their correlational results with findings from interviews (with students and faculty members) to gain a comprehensive understanding of the complex relationship between English proficiency and academic performance among international students.

Those who advocate a methods perspective cite its common use as a perspective during the 1990s and note that it is a clean approach, untangled with philosophy and paradigms (Elliot, 2005). Researchers can use any paradigms they want to, because the quantitative and qualitative methods are not "inherently linked to any particular inquiry paradigm" (Greene et al., 1989, p. 256). Critics of this conceptualization argue that one cannot separate methods from paradigms and worldviews and that data cannot be divided into a dichotomy of quantitative or qualitative data. These critics have argued that mixed methods may not simply be conceptualized as just using two types of data (qualitative and quantitative) or two types of data collection techniques (questionnaires and unstructured interviews) (see Gilbert, 2006; Sandelowski, 2003). This view has been labeled as "quasimixed" by Teddlie and Tashakkori (2006).

## The Methodological Perspective

The methodological perspective on mixed methods holds that one cannot separate methods from the larger process of research of which it is a part and that discussions of mixed methods should focus on the entire process of research, from the philosophical assumptions, through the questions, data collection, data analysis, and on to the interpretation of findings. This approach explicitly or implicitly ties the methods to philosophical assumptions (what was called the "paradigm-method" fit in early mixed methods discussions; see Reichardt & Rallis, 1994).

This perspective is espoused by several mixed methods writers today, such as Tashakkori and Teddlie (1998), who titled their book *Mixed Methodology*, suggesting an approach to mixed methods beyond simply the methods and extending to all phases of the research. In a more recent work, Teddlie and Tashakkori (in press) define research methodology as a broad approach to scientific inquiry specifying how research questions should be asked and answered, general preferences for designs, sampling logic, analytical strategies, inferences made on the basis of findings, and the criteria for establishing quality. In contrast, they define research methods in terms of more specific strategies and procedures for collecting and analyzing data, including research design, sampling procedures, data collection, and data analysis strategies. This methodological perspective is also described in a recent article on the definition of mixed methods by Johnson, Onwuegbuzie, and Turner (2007), who stated that mixed methods research combines qualitative and quantitative research in viewpoints, data collection, analysis, and inferences. The article by Dellinger and Leech in this issue has strong ties to the methodological perspective spanning the entire process of research, with the authors drawing clear connections between the foundational element of the review of the literature, the mixed methods validity elements, and the use and consequences of the data.

Those who advance this perspective hold that methods follow research purposes and questions that are in turn rooted in the cultural, philosophical, and value systems of the researchers and participants (e.g., Ridenour, Newman, & Newman, in press). Critics, on the other hand, have raised the question of what is being mixed and how it is mixed. Can we mix paradigms (Bliss, Rocco, & Bliss, 2004)? Those advocating the "incompatibility thesis" have argued that mixed methods research is not possible, because qualitative and quantitative research is associated with two distinct paradigms that are incompatible with each other (e.g., Brannen, 2005; Sale, Lohfeld, & Brazil, 2002).

#### **The Paradigm Perspective**

Those who hold and write from the paradigm perspective argue that mixed methods research is less about methods or the process of research and more about the philosophical assumptions that researchers bring to their inquiries. To understand mixed methods research, they say, requires a focus on the philosophical issues such as what knowledge warrants our attention, how knowledge is learned, the nature of reality and values, and also the historical and sociopolitical perspectives that individuals bring to research. This view is taken by individuals who approach mixed methods research from a social foundations perspective, and it seems to be more prevalent in the commonwealth countries (e.g., the United Kingdom, Australia, Canada) than in the United States, and embraced more by qualitative researchers than quantitative researchers.

Examples of this perspective are found in Maxcy (2003) and in Morgan (2007), who have written about the ascendancy of pragmatism as the foundation for mixed methods research, and in Tashakkori and Teddlie (2003), who referred to 13 writers who have advanced pragmatism as the philosophical basis for mixed methods inquiry. Others have suggested that although many paradigms might be used in mixed methods research, researchers have a responsibility to honor the different worldviews and the contradictions, tensions, and oppositions they reflect (Greene & Caracelli, 1997). Still others have discussed alternative paradigm perspectives, such as a transformative perspective with social justice ends (Mertens, 2007).

Critics have pointed out that pragmatism is an American perspective and is not consistent with worldviews in other countries and that paradigms are as important as methods but are seldom explicitly discussed in journal articles. We must admit that we are surprised to find some individuals viewing paradigms as rigid and "fixed" worldviews that (a) cannot be combined in a mixed methods study and (b) cannot change during a study. In a sequential mixed methods design, a researcher may begin with a quantitative survey (embracing a postpositivist perspective) to answer a theory-driven research question and move into collecting qualitative focus group data (embracing a constructivist perspective) in response to a qualitative question. Such a shift in worldview has been demonstrated in current research and is not unrealistic. Also, as suggested by Greene (2006), there is value in comparing and contrasting the inferences that emerge from examining the findings of a study from multiple worldviews and perspectives.

#### **The Practice Perspective**

The fourth perspective follows a "bottom-up" approach to conducting research (Tashakkori, 2006). In this perspective, the need to use mixed methods strategies may emerge during investigators' ongoing research projects, as a part of efforts for finding answers to research questions or planned from the outset. For example, an ethnography might include mixed methods procedures by collecting and analyzing both quantitative and qualitative data (see, e.g., LeCompte & Schensul, 1999). Experimental and interventionist researchers in the health sciences have been writing for several years now about conducting experiments with both quantitative and qualitative questions and data (Sandelowski, 1996). A more recent example, Elliot's (2005) book, uses qualitative and quantitative approaches in narrative research. Luck, Jackson, and Usher (2006) discussed composing a case study analysis using both quantitative and qualitative data, and Leahey (2007) discussed using mixed methods within a secondary analysis of survey data. Other examples of innovative approaches include the use of mixed methods procedures in meta-analyses, the use of mixed methods thinking in conducting a literature review, and the use of mixed methods in visual methodology. In the review of Page's (2007) book in this issue of JMMR, we find the author applying mixed methods thinking to the field of complexity science.

The practice perspective, then, suggests that researchers conducting mixed methods studies are actually using both quantitative and qualitative approaches to conduct their "traditional" research designs, whether these are narrative studies, experimental studies, meta-analyses, ethnography, evaluations, action research, and so forth. That mixed methods would emerge from such a bottom-up manner makes sense, because researchers tend to embrace new methodological ideas when they can attach them, in some way, to their current forms of and preferences for research. In addition, this practice perspective seems to be a pragmatic position in which we look to how mixed methods research is actually being used.

As authors who have written about mixed methods extensively over the years, it also occurs to us that we have embraced all four perspectives at one time or another. Our guess is that many scholars who write about or conduct integrated studies have had similar experiences and that rigidly adhering to one perspective or another fuels many disagreements about the nature of mixed methods research. Perhaps these perspectives will become less distinct over time as the field matures. We recall what Guba said in 1990: "Having the

term not cast in stone is intellectually useful and allows for reshaping understandings" (p. 17). We agree.

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