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Editorial

Mapping the Field of Mixed Methods Research

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The intent of this editorial is to advance my list of topics currently being discussed in the field of mixed methods research. As one who has been involved in the mixed methods field since its beginning 20 years ago, I have some sense of the topics that have evolved and that hold center stage in mixed methods discussions. Furthermore, as one of the founding coeditors of the *Journal of Mixed Methods Research* (*JMMR*; and outgoing editor after June 2009), I have been privileged to have examined close to 300 manuscripts submitted to the journal in the past 3 years, and I have taken notes on what I have seen as potential contributions of these manuscripts to the field of mixed methods research.

My discussion will first address why we, as researchers, need a map of the field at this current time. Then I will advance a list of 30 topics that are being discussed today in the mixed methods literature. To crosscheck the accuracy of my list, I will reflect on the topics that were discussed last summer at the 2008 Mixed Methods Conference at Cambridge University, UK. I will note differences and similarities between the papers presented at the conference and my list. Then I will select four topics from my list, discuss the development of the topics, and note recent insightful contributions that have emerged in the literature. Finally, I will end with some thoughts about the future of mixed methods research. I hope that by reading this editorial you will learn how one individual constructs the field of mixed methods today, obtain a glimpse into what topics current writers presented at the Mixed Methods Conference last July, and assess how your mixed methods manuscript might make a contribution to the field.

Why We Need a Current Map

We need a current map of the field of mixed methods to help authors who are submitting manuscripts to *JMMR*. As a coeditor of *JMMR* (and I do not speak here for Abbas Tashakkori, the other coeditor), I often ask authors, "Please rewrite your manuscript with attention to how it contributes to the mixed methods literature." As I examine their manuscripts, I like to note in my logbook something about "here is the contribution of this manuscript." But, of course, the author is not before me to respond. The author might ask,

What does a contribution mean?
Just tell me how it adds to the literature.
What literature?

Author's Note: This was presented as the keynote address, entitled "A Current Assessment of How Mixed Methods Has Developed," at the 4th Annual Mixed Methods Conference, Fitzwilliam College, Cambridge University, UK, sponsored by Anglia Ruskin University, July 21, 2008. I appreciate the thoughtful review of an earlier version of this editorial by Abbas Tashakkori, Burke Johnson, and Vicki L. Plano Clark.

Take a hypothetical professor from political science with a specialty in public policy. She or he knows the research on public policy quite well and perhaps also has a good grasp of research methods in political science. In response to this individual's question about the literature, the following conversation could unfold:

Have you read any articles about mixed methods in the social sciences?

Not really. You see, I am content specialist in public policy in political science and I am quite familiar with the methods that we use in political science.

Perhaps the scenario unfolds now that the author retracts the manuscript because it is not suitable for publication in *JMMR*. Perhaps the author begins reading the mixed methods articles, chapters, and books that have been written over the past 20 years. It seems to me that this professor could profit from having a map of the mixed methods literature so that they could position their study within the existing discussions.

Assume that this professor inquires further:

What do you mean by a "contribution"?

It means adding something new to the literature.

But I quickly add,

But also your study might replicate existing literature, test a theory, raise the voices of the under-represented, provide an explanation for the meaning of experiences, promote social justice, or even represent your own personal transformation gained through your research.

I do believe in all of these reasons for publishing an article in *JMMR*, as is discussed within a previous editorial on ways of contributing to the literature (Creswell & Tashakkori, 2008). Right now, however, I want to focus on developing a map of the mixed methods literature and consider how a manuscript may contribute to this growing picture.

Another reason for the need for a current map is that maps available in the field are rapidly becoming dated or are too general to use. For example, in 2003, Tashakkori and Teddlie, in their 26-chapter *Handbook of Mixed Methods*, announced the six core issues of the field.

1. The nomenclature and basic definitions used in mixed methods research
2. The utility of mixed methods research (why do we do it?)
3. The paradigmatic foundations for mixed methods research
4. Design issues in mixed methods research
5. Issues in drawing inferences in mixed methods research
6. The logistics of conducting mixed methods research

This *Handbook* provides a nice map of the field. But it is now 5 years old (a new edition is in the planning stage) and I feel that much of the explosion in interest in mixed methods has occurred during the past 5 years.¹ Alternatively, we could turn to the dimensions of the field identified in a *JMMR* article by Jennifer Greene, published in 2008. This article was adapted from her keynote address to the Mixed Methods Special Interest Group Business Meeting at the American Educational Research Association conference in April 2007. She

created a generic framework for the components of any social science methodology and she applied this framework to mixed methods research asking, What do we know? What have we accomplished? And what important questions remain to be engaged? Her four domains of this framework were as follows:

1. Philosophical assumptions and stances
2. Inquiry logics (methods, sampling, design, etc.)
3. Guidelines for practice (empirical guidelines, such as how to mix)
4. Sociopolitical commitments (interests being served, situational politics)

These domains provide a good, general map, but they too provide insufficient guidance for specific topics and areas in need of further development in the mixed methods field. We need a more detailed map.

A Map of Recent Topics in the Mixed Methods Literature

So I began thinking about designing a map of the field as it currently stands. I have a small notebook and, for every manuscript that I review for *JMMR*, I faithfully log a statement about the potential contribution of the manuscript to the field of mixed methods. Recently I went through this notebook and assembled a list of 30 topics that represent the contributions of recent mixed methods manuscripts. Then I aggregated these topics into five domains. Once this was done, I went through the 2008 program for the Mixed Methods Conference held in July 2008 at Cambridge University, UK, and assigned the papers to my list of topics. In this way, I could see the coverage of the conference topics. I apologize to presenters if I misassigned their papers to one of my topics. Indeed, some papers addressed several topics on my list, and I chose to assign them only to one. Also, in this editorial I cite only the lead authors and their general topics rather than reference all of the papers presented at the conference. The reader is directed to the conference Web site for exact titles (see <http://www.mixedmethods.leeds.ac.uk/pages/information/confarchive.htm>).

My Map and the Conference Papers

Table 1 provides my list of domains, topics, and my assignment of conference papers to the topics. In my map of the field, I listed four topics under philosophical and theoretical issues: combining philosophical positions, worldviews, and paradigms; the philosophical foundation for mixed methods; the use of qualitative theoretical lens in mixed methods; the false distinction between quantitative and qualitative research; and thinking in a mixed methods way (mental models; Greene, 2007). Individuals presenting at the conference continued to debate the need for and identification of the philosophical foundation for mixed methods research, and they discussed whether quantitative and qualitative data and approaches are truly different. I was surprised to not find any papers at the conference on theoretical lens and mixed methods research, such as ethnic, racial, disability, sexual orientation, and feminist topics as used in mixed methods studies. A graduate student I am working with has identified 34 theoretically driven mixed methods studies for analysis, all

based on Mertens's (2003) transformative perspective (Sweetman, 2007). I also hope to see future conference papers examining theoretical lens topics. I also urge authors to take up Greene's idea of mental models and discuss more its relevancy and application. Greene embraced the use of multiple perspectives as a central idea in mixed methods thinking. Extrapolating from this idea, I think that we see all around us in everyday life elements of qualitative and quantitative thinking. In the Katrina hurricane disaster in the United States, for example, commentators presented both the numbers of displaced individuals and the stories of their plight. A family physician at one of my workshops wrote to me saying that I might talk about mixed methods research using the example of multiple commentators at a soccer game in which we often have a color commentator (qualitative) and the play-by-play commentator (quantitative). Many other examples could be cited in which we find elements of storytelling and aspects of trend charts.

I listed numerous topics under the domain of techniques of mixed methods. These range from unusual blends of sources of data, to specific elements of the process of research, and on to validity and ethics. Consistent with what Greene (2007) said, many topics being discussed in the field of mixed methods address techniques. There was good coverage of the techniques of mixed methods at the conference. As might be expected, several papers focused on the steps of the research process from theory development, to research questions, and on to the interpretation of the findings. Studies on the research process from a longitudinal, evaluation perspective were not presented but these designs may be more widely discussed at evaluation conferences. I was also surprised to learn that no papers were taking on the issue of validity. Although I did not see unusual methods being combined, perhaps a closer inspection of the papers would yield more possibilities. A paper, for example, linking longitudinal survey data and life history narratives is an unusual but creative blend of quantitative and qualitative research (Singer, Ryff, Carr, & Magee, 2002).

Topics related to the nature of mixed methods reflect the ongoing discussion of defining the field, creating a language for it, and using it as a stand-alone design or in conjunction with other designs and methodologies. At the conference, the use of mixed methods in existing designs, such as case studies, formative evaluation in experiments, and action research, attests to an emerging trend toward incorporating mixed methods procedures into traditional designs. I was surprised to learn that the conference papers did not continue to probe a definition of mixed methods, as had been the case in past conferences. Perhaps enough had been said on this topic and individuals were content to use the definitions provided in the current literature (see Johnson, Onwueabuzie, & Turner, 2007). The use of a bilingual language is perhaps one of those "hidden" topics that surfaces in others ways, such as in discussions based on postmodern deconstructions or in research designs.

Many fields are adopting and using mixed methods. We are also beginning to learn how the fields are using it especially in team approaches and in the adaption of mixed methods to specific discipline techniques. Also part of this picture is the teaching of mixed methods and the ways fields are writing up their studies for publication. As suggested by papers at the conference, I noted the trend of mixed methods studies addressing topics in different content fields (e.g., child care, illness, poverty, etc.). The authors of these studies may actually make a case that their study "is the first mixed methods study in their content area." To add to the mixed methods literature, however, I would suggest that these content studies be more than simply the use of mixed methods research in different content areas. The authors might reflect on the current use of methodologies in their content field and then go on to

Table 1
A Map of Recent Topics and 2008 Mixed Methods Conference Papers

| Domain | Recent Topics for Adding to the Mixed Methods Literature | 2008 Mixed Methods Conference Papers | |
|--|---|---|--|
| Philosophical and theoretical issues | Combining philosophical positions, worldviews, and paradigms | | |
| | Philosophical foundation mixed methods | Onwuegbuzie et al.—dialectical pragmatism Aroni—historical shifts in paradigm debate | |
| | Use of qualitative theoretical lens in mixed methods | | |
| | False distinction between qualitative and quantitative research | Muncey—subjective-objective dichotomy Casey et al.—polarity between quantitative and qualitative | |
| | Thinking in a mixed methods way-mental models | | |
| | Techniques of mixed methods | Unusual blends of methods | |
| | | Joint displays of quantitative and qualitative data | |
| | | Longitudinal, evaluation studies | |
| | | Transforming qualitative data into counts | |
| | | Process steps of research (theory, questions, sampling, interpretation) | Richardson—theory development Okeleke-Nezianya—research questions Pere & Feijoo—theory development Papadimitriou & Westerheijden—interpretation integration |
| New thinking about research designs | | Jones et al.—mixed sequential and concurrent designs Shaw et al.—example of embedded design | |
| Methodological issues in using designs | | Day—methodological challenges Godfrey—differences between stages | |
| Notations for designs | | | |
| Visual diagrams for designs | | | |
| Software applications | | Peladeau—mixing methods and software | |
| Integration and mixing issues | Plano Clark et al.—integration designs Themelis—complementary approaches | | |
| Rationale for mixed methods | | | |
| Validity | | | |
| Ethics | Carpenter—holistic approach Mertens & Creswell—overview and designs | | |
| Nature of mixed methods | Definition of | | |
| | Bilingual language for | | |
| | Incorporation of mixed methods into existing designs | Meier—case study applications Currie & Farmer—case studies Fernandez—multiple case study Thomas—qualitative research in interventions Coleman et al.—formative perspective in interventions | |
| | | | |

(continued)

Table 1 (continued)

| Domain | Recent Topics for Adding to the Mixed Methods Literature | 2008 Mixed Methods Conference Papers |
|--|--|---|
| Adoption and use of mixed methods | Fields and disciplines using it | Pere et al.—embedded qualitative in interventions |
| | | Zoladi et al.—qualitative in intervention (RCD) |
| | | Dickmann et al.—action research as mixed methods |
| | | Dakich—Delphi applications |
| | | Brannen—workers' careers in child care |
| | | Elaswarapu—healthcare systems |
| | | Ramsey—critical illness |
| | | Mayoh—chronic illness |
| | | Cooper et al.—inflammatory bowel disease |
| | | Pun et al.—self care adherence |
| | | Landy—postpartum women |
| | | Prowse—poverty and development research |
| | | Gerber—art psychotherapy |
| | | Breen—parapsychology |
| | | Dodwell—mental health |
| | | Steggles et al.—cancer |
| Team approaches | Team approaches | Salzano et al.—further education |
| | | Engward—ethics of student nurses |
| | | Albar—abandoned young people |
| | | Wisdom et al.—serious mental illness |
| | | Faulkner—dignity of older individuals |
| | | Reid et al.—environmental behavior research |
| | | Molina-Azorin—business management |
| | | Haller-Hayon—interorganizational information sharing |
| | | Brady & O'Regan—choices of teams |
| | | Galt—interdisciplinary health services teams |
| Linking mixed methods to discipline techniques | Linking mixed methods to discipline techniques | Ramsey & Bond—using projective techniques from psychology |
| | | Regan—use of repertory grid in science education |
| | | Wibberley et al.—teaching at masters level |
| Teaching mixed methods to students | Teaching mixed methods to students | O'Cathain—reporting |
| | | Corden & Hirst—final report development |
| Writing up and reporting | Writing up and reporting | Brindle—writing for publication |
| | | Crow—Economic and Social Research Council funding |
| | | Boyd—compromises made |
| | | |
| Politicization of mixed methods | Funding of mixed methods research | |
| | Deconstructing mixed methods | |
| | Justifying mixed methods | |

Note: These papers were presented at the Mixed Methods Conference held July 2008 at Cambridge University, UK. For detailed information about each paper, the conference program can be downloaded from <http://www.mixedmethods.leeds.ac.uk/pages/information/confarchive.htm>.

suggest how the use of mixed methods research extends the current methodologies used in their respective fields. Such a perspective would be of interest to the mixed methods community. More and more, writers are discussing the team approach to mixed methods as well as issues in teaching the topic and in reporting results to different audiences. A researcher might look at Laurel Richardson's book *Writing Strategies* (1990) and examine how the language of mixed methods needs to be adjusted for different audiences, such as policy makers, scholars, and lay people. A writer might examine the article in the *Annals of Family Medicine* to see how health science writers might configure their studies for acceptable publication in medical journals (Stange, Crabtree, & Miller, 2006).

The topics of funding, deconstruction, and justification under the politicization of mixed methods are not surprising, and as the field grows in visibility, more papers are predicted for future conferences. We had few papers in this area at the 2008 Mixed Methods Conference. However, at the Qualitative Inquiry 2007 Congress in Illinois recently, several audience members asked for my mixed methods presentation (Creswell, 2007) expressed keen interest in the deconstruction of terms in mixed methods, such as *mixing*. They were especially interested, too, in the Freshwater (2007) article on a postmodern critique of mixed methods presented in *JMMR*.

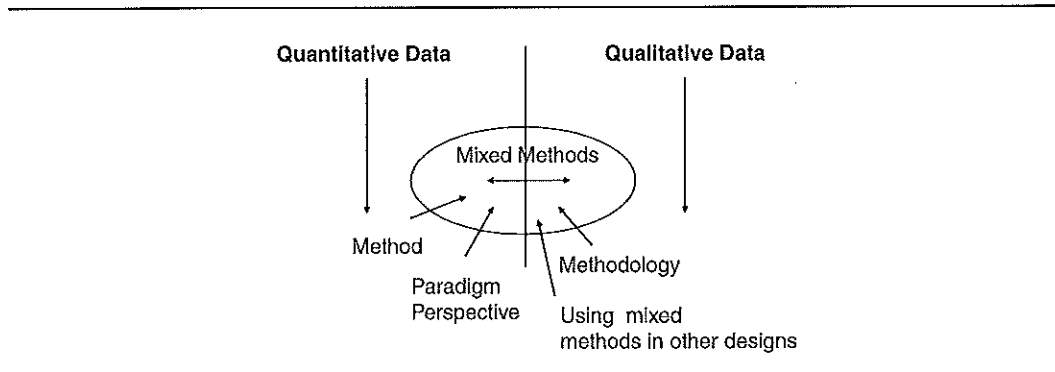
Select Topics and Insightful Contributions

Now I will take four topics on my list, briefly discuss some history about each topic, and then talk about recent insightful contributions that I believe will extend the conversation about the topics.

Incorporation of Mixed Methods Into Other Designs

In terms of discussions about research designs, I often begin with a general introduction to mixed methods. As shown in Figure 1, mixed methods was originally viewed as two separate strands of research—quantitative and qualitative—with a clear division between the two. In the mid-1990s, the discussion seemed to change from the two separate strands to how the two strands might be linked, and a connection was made between the two strands. Out of this linkage grew the idea of mixed methods as we know it today. But immediately different perspectives emerged on what constituted the nature of mixed methods (see an earlier editorial by Creswell & Tashakkori, 2007). Some, like myself, focused on the methods of collecting and analyzing data, recognizing that the methods were an integral part of the entire process of research. Others focused on how qualitative and quantitative research flowed into all phases of the research process (the methodologists). Still others focused on philosophy. Now we are seeing yet another group emerge—those who combine mixed methods with more traditional designs. So we have ethnographers using mixed methods procedures as well as case studies researchers, experimental health science investigators, and narrative researchers (Eliot, 2005; LeCompte & Schensul, 1999; Luck, Jackson, & Usher, 2006; Sandelowski, 1996). The use of mixed methods procedures within existing designs and procedures has tremendous potential for making mixed methods relevant to many areas in many disciplines, including visual methodology. I am writing an

Figure 1
Perspectives About Mixed Methods



article now on how an award-winning documentary developer combined quantitative and qualitative data and used one of the mixed methods designs in composing a documentary on immigrants (Creswell & McCoy, in press). I am curious about how visual methodologists at the University of KwaZulu-Natal weave quantitative components into their qualitative documentaries on HIV-AIDS at the Centre for Visual Methodologies and Social Change (<http://cvm.za.org>).

Paradigms as Beliefs of a Community of Scholars

I am tired of the “incompatibility” argument that one cannot mix paradigms. It is as if a particular researcher’s worldview is a fixed trait that cannot be examined, changed, or combined. Furthermore, mixed methods research can be conducted by teams that include specialists in quantitative and qualitative research. It is required that members of these teams listen to each other. When the issue of incompatibility arises, it seems to be a conversation stopper. If we cannot mix paradigms, so the argument goes, then mixed methods research is untenable. Fortunately, we have moved beyond this thinking. We now have mixed methods writers talking about the possibility of using multiple paradigms in research, and yes, sometimes they may be in tension, and such tension is good. The dialectic between opposing ideas can contribute to new insights and new understandings (Greene & Caracelli, 1997). Then there are those who have searched for the single underlying paradigm for mixed methods research. Many have found this paradigm in a traditional U.S. philosophy, pragmatism (Tashakkori & Teddlie, 2003). Others, such as Mertens (2008), believe in the use of a transformative worldview. With my colleague, Plano Clark, I have taken a different perspective (Creswell & Plano Clark, 2007). We see a link between paradigms and methods. Perhaps one paradigm (like pragmatism) serves as an adequate foundation for concurrent or parallel types of designs, while paradigms may shift during a sequential design in which one starts from a postpositivist perspective (quantitative) and then moves to a constructivist (qualitative) worldview (Creswell & Plano Clark, 2007). This linking of paradigms and methods is not appreciated by qualitative researchers who have taken the stance that many different kinds of methods can fit with each type of paradigm (Denzin & Lincoln, 2005). I respect this

view but, in practice, I still believe that many researchers choose their methods because of their paradigms that either explicitly or implicitly frame their research.

An exciting new development recently in this paradigm discussion is the emergence of the community-of-scholars idea that has been discussed by Morgan (2007) and Denscombe (2008). I recommend David Morgan's *JMMR* article to you. It is a brilliant piece of scholarship and it was presented at the Cambridge Mixed Methods Conference in 2005 as the keynote address. One aspect of his article is the presentation of four versions of the concept of paradigms. For all four types, he saw paradigms as "shared belief systems that influence the kinds of knowledge researchers seek and how they interpret the evidence they collect" (p. 50). However, they differ in level of generality. Paradigms can be viewed as worldviews (an all encompassing perspective on the world) or they can be seen as epistemologies incorporating ideas from the philosophy of science such as ontology, methodology, and epistemology. Paradigms can be viewed as the best or typical solutions to problems, and paradigms may represent shared beliefs of a research field. It is this last perspective that Morgan strongly endorsed. Researchers share a consensus in specialty areas about what questions are most meaningful and which procedures are most appropriate for answering the questions. In short, many practicing researchers look to paradigm perspectives from a community-of-scholars perspective (p. 53). This was the version of paradigms that Kuhn (1970) most favored, according to Morgan.

I also recommend Denscombe's (2008) recent *JMMR* article in which the community-of-scholars idea was reinforced and expanded. He outlined how communities may work using such ideas as shared identity, research problems, networks, knowledge, and informal groupings. I am excited about this line of thinking. It leads to a better understanding of the trend toward fragmentation of the mixed methods field in which various disciplines adopt mixed methods in different ways, create unique practices, and cultivate their own specialized literatures. When I hear my colleagues at the Veterans Administration Research Center in Ann Arbor, Michigan, in the health sciences talk about mixed methods as formative and summative evaluation procedures, I recognize that a unique field or discipline orientation to mixed methods is being applied (Forman & Damschroder, 2007).

New Thinking About Research Designs

There has been much development on the topic of mixed methods research designs. I have learned that designs used in practice are much more subtle and nuanced than I had first imagined. When my colleague Vicki Plano Clark and I wrote an introduction to the field for beginning mixed methods researchers (Creswell & Plano Clark, 2007), we discussed four types of designs. Triangulation (or concurrent) designs involve one phase of data collection gathered concurrently. Explanatory or exploratory designs require two phases of data collection, quantitative data collection followed sequentially by qualitative data collection (or vice versa). Embedded designs, in which one form of data are embedded within another, may be either a single- or a double-phase design with concurrent or sequential approaches. Along with these designs we now have a notation system (Morse, 1991), visual diagrams, and guidelines for constructing the visual diagrams (Ivankova, Creswell, & Stick, 2006). We now know that these designs are not complex enough to mirror actual practice, although I would argue that they are well suited for researchers initiating their first mixed methods study.

Complex designs have come to my attention through evaluation researchers. For example, Nastasi and colleagues (2007) have introduced complex evaluation designs with multiple stages and the combination of both sequential and concurrent phases. The designs have begun to incorporate unusual blends of methods, such as combinations of quantitative and qualitative longitudinal data, discourse analysis with survey data, secondary datasets with qualitative follow-ups, and the combination of qualitative themes with survey data to produce new variables. The representation of designs has also advanced with joint matrixes of quantitative and qualitative data in the same table, an approach encouraged by the matrix feature of qualitative software products.

A fascinating trend to watch is the reconceptualization of research designs from typologies to other ways of thinking. Typologies, such as the four I have mentioned, are just one of a dozen classifications that Plano Clark and I detailed in our mixed methods book (Creswell & Plano Clark, 2007). In these designs, we focus on the weight given to qualitative and quantitative data, the timing of both forms of data, and the stage of the research process in which mixing occurs.

Another way of viewing designs is to look at mixed methods procedures not as designs but as a set of interactive parts. Based on systems theory, Maxwell and Loomis (2003) conceptualized the interactive five dimensions of the research process consisting of the purpose, the conceptual framework, the questions, the methods, and the issue of validity. Thus design, in their approach, gives way to the process of research for a more full, more expansive view of the way to conceptualize and design mixed methods research. Another approach is the innovative thinking of Hall and Howard (2008). They advanced a synergistic approach in which two or more options interact so that their combined effect is greater than the sum of the individual parts. The core principles of this approach are that the sum of quantitative and qualitative is greater than either approach alone. Instead of looking at mixed methods as a priority of one approach over the other or a weighting of one approach, the researcher considers the equal value and representations of each. Instead of unequal importance of the two approaches, the two are viewed from an ideology of multiple points of view, instead of differences. Collaboration on a mixed methods project means researchers share their areas of expertise. The researcher also balances objectivity with subjectivity. These are all important principles in design.

The synergistic approach along with other challenges to typological perspectives contribute to a softening of the differences between qualitative and quantitative research, provide answers to questions about dominance of one method over the other (e.g., Denzin & Lincoln, 2005) and honor the formation of research teams with diverse expertise. In the future, I will need to rethink how I am looking at designs for mixed methods researchers.

Advocacy Through Extramural Funding

We have at least 15 books on mixed methods research, and several more are in production. We have several journals devoted to mixed methods research—*Journal of Mixed Methods Research*, *Quality and Quantity*, *Field Methods*, and the online journal *International Journal of Multiple Research Approaches*. For *JMMR*, the reception has been outstanding in our 2 years of publications. From January through May 2008, for example, we had 58,000 hits on the journal Web site. According to our publisher, Sage Publications, *JMMR*

is tracking like a long-established journal, and the number of table of content alerts (8,900) for every issue is the highest for Sage journals except for one other journal (personal communication, Leah Fargotstein, Sage Publication, June 2008). Mixed methods research is expanding internationally. Recent publications in *JMMR* report studies that include participants from Sri Lanka (Nastasi et al., 2007), Germany (Bernardi, Keim, & von der Lippe, 2007), Japan (Fetters, Yoshioka, Greenberg, Gorenflo, & Yeo, 2007), and the United Kingdom (O' Cathain, Murphy, & Nicholl, 2007). In addition, mixed methods has been embraced by a growing list of discipline fields. I have provided, during the past 5 years, workshops for scholars in fields such as social psychology, social work, psychology, nursing, family medicine, health services research, and organizational studies. New courses are emerging on mixed methods in different discipline fields. A number of courses are now available on mixed methods research (Creswell, Tashakkori, Jensen, & Shapley, 2003) to augment existing research methods courses that now incorporate both quantitative and qualitative perspectives. Several online mixed methods courses are offered in the United States at the University of Nebraska–Lincoln taught by an individual in the field of mass communications, Ron Shope, and at the University of Alabama–Birmingham by the educator, Nataliya Ivankova.

I am especially excited about learning more about funding sources for mixed methods research. Funding agencies encourage mixed methods research such as the National Institutes of Health in the United States (National Institutes of Health, 1999) and in the United Kingdom through the Economic and Social Research Council's Research Methods Programme (Bryman, 2006). In our Qualitative and Mixed Methods Research Office at Nebraska, we have undertaken the study of projects funded by the U.S. National Institutes of Health. We have gone into their database (CRISP) and looked at newly funded projects over the past 5 years and examined funded projects with the words "mixed methods" in the project description. We then plotted on a graph the number of projects that include these words. Between 2003 and 2008, the number of projects with these words has increased from year to year, and we know that the National Institute for Mental Health has funded the most mixed methods projects. We then examined the projects that were given to new scholars, the K01 awards, which involve mentoring and the conducting of a specific project. We see that several emerging scholars seek to learn more about qualitative and mixed methods research in their learning phase of their K grants. My colleague, Plano Clark, will be interviewing these investigators and learn how they incorporated mixed methods into their projects and the specific challenges they encountered. This will provide added insight into the practice of conducting a mixed methods study. Perhaps the continued investigation of funding sources will lead new policies for U.S. federal agencies about evaluative criteria for assessing mixed methods studies.

Conclusion and the Future

These specific topics are only a few areas in which I feel that future researchers should devote their attention as mixed methods continue to grow. Scholars looking to write a manuscript that contributes to the mixed methods literature may want to start by examining this map and considering where their work may contribute to our current understandings of the field. Undoubtedly, some will criticize my efforts as attempting to fix the field and limit

conversation. To them I say that we need my list as well as the lists of topics of many others. This is only a start of the conversation.

As we look into the future, I am reminded as to how the *Handbook of Mixed Methods* (Tashakkori & Teddlie, 2003) ended on a note predicting the future for the field of mixed methods research. Now, 5 years later (and many *JMMR* manuscripts later) I would like to make some predictions about some of my topics and the future of mixed methods research. Here is what I see.

The field of mixed methods will continue to expand across disciplines and fields so that my hypothetical professor in political science that I spoke of earlier will have a discipline-based literature on mixed methods. Generic books about mixed methods will no longer be needed; instead, we will have discipline-based books, such as the recently issued book on mixed methods for nursing and the health sciences (Andrew & Halcomb, 2008). The critics of mixed methods will always be present but the concerns about identity will quiet down. Splinter groups will emerge with specific interests, such as feminist mixed methods researchers or mixed methods software developers. The "Atlantic gap" will not be a problem because people from both sides of the ocean have worked hard, from the beginning, to collaborate. In my opinion, this is different than how qualitative research emerged during the 1980s.

We will look back in several years and see that it was the graduate students who promoted mixed methods research and who taught their faculty the importance of this approach to inquiry and the value of not adhering strictly to either quantitative or qualitative approaches. The students will be more interested in how best to address their research problems than the politics of methodology. Mixed methods techniques will be refined and expanded. For example, we will have many models from which to choose to construct a joint matrix of qualitative and quantitative data. My list of topics will be seen as too brief and too incomplete, much in the way I have talked about the Tashakkori and Teddlie (2003) and the Greene (2007) perspectives. Mixed methods research will no longer be seen as a new approach.

Perhaps mixed methods manuscript writers of the future will have more guidance as to whether their paper contributes to the literature. For those preparing manuscripts, topics of interest will be clearly before the mixed methods community and investigations will have a foundation of literature on which to build a new manuscript. The future editors of the *JMMR* will not have to respond with the question, "How does your manuscript contribute to the literature?" and authors will state, somewhere toward the beginning of their manuscripts, "Here is how my study makes a contribution."

John W. Creswell
Founding Editor

Note

1. I recently had a chance to read the new, insightful Teddlie and Tashakkori (2009) book, *Foundations of Mixed Methods Research*, in which the authors updated their 2003 *Handbook* list of issues. This book was published after the 2008 Mixed Methods Conference. The authors mentioned issues in need of further investigation to include several ideas, such as the use of mixed methods questions, the development of a nomenclature for mixed methods, questions about what mixed methods adds beyond quantitative and qualitative approaches, the integration of qualitative and quantitative components, the need for standards in mixed methods research, the use of rationales for using mixed methods, the difficulty in finding distinct strands of qualitative and quantitative in

studies, and the use of both sequential and concurrent designs in studies. Many, but not all of these topics, are discussed in this editorial.

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