

# 11

## INTERVIEWS WITH THE EARLY DEVELOPERS OF MIXED METHODS RESEARCH<sup>1</sup>

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### Objectives

This chapter has the following learning objectives:

- to understand the thoughts of the early developers of mixed methods research on the field;
- to explore how the initial developers became interested in mixed research, their personal passions and hopes for mixed research, ideas or thoughts they had/have that are not readily reflected in the writings, and where they see the field moving, among other areas; and
- to compare and contrast the thoughts from the interviews of the early developers.

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**M**ixed methods research is not a new phenomenon. According to Johnson, Onwuegbuzie, and Turner (2007), “Although mixed methods research is not new, it is a new movement, or discourse, or research paradigm (with a growing number of members) that has arisen in response to the currents of *quantitative research* and *qualitative research*” (p. 113, italics in original). Yet, even though it is not a new phenomenon, it is moving, evolving, and changing. Therefore, it is important and interesting to understand where the movement started, where it is at present, and where it may be going.

The goal of this chapter is to provide a forum to share the thoughts of the developers of mixed methods research on the field. This chapter starts with a brief discussion of the historical roots of three research genres: quantitative, qualitative, and mixed.<sup>2</sup> Next, the interviews with the early developers of mixed methods research are presented, along with quotes gathered from the interviews. The interview questions explored the past, present, and future of mixed methods research, specifically in the following areas: how the initial developers became interested in mixed research, their personal passions and hopes for mixed research, ideas or thoughts they had/have that are not readily reflected in their writings, and where they see the field moving. Finally, distinctions and connections (differences and similarities) across the interviews are described. Having more understanding of the thoughts of the early developers of mixed methods research may help the field develop a stronger foundation and, thus, a firmer sense of where it came from and where it may be moving.

### ♦ *Identifying the Beginning of a Research Genre*<sup>3</sup>

To assess when a research genre began is tricky. First, it is necessary to explicate how the beginning of a movement could be

identified. For purposes of this chapter, the beginning of a movement in research will be defined as the point at which researchers began to formalize and promote the approach. While quantitative research has roots going back to antiquity, its origins in the social sciences were delayed until those fields of study began to emerge midway through the 19th century. Thus, for the quantitative research approach, 19th-century methodologists could be identified as beginning the movement (Teddlie & Johnson, 2009). Researchers such as August Comte (1798–1857) in sociology and Wilhelm Wundt in psychology (1832–1920) paved the way for the quantitative approach. These authors were writing about quantitative research in their specific fields at a time when others were not; furthermore, these authors were promoting the use of quantitative research. These methods dominated in the social and behavioral sciences through the 1960s. Seminal quantitative works of the 20th century include Campbell and Stanley (1963) and Cook and Campbell (1979).

Regarding qualitative research, Denzin and Lincoln (2005) suggest the history of the qualitative approach in North America began in the early 1900s and incorporates eight phases. According to these authors, the second phase, from the post–World War II period to the 1970s, was when textbook authors (e.g., Bogdan & Taylor, 1975; Glaser & Strauss, 1967; Lofland & Lofland, 1994) attempted to formalize the qualitative approach. Yet, Denzin and Lincoln (2005) do not delineate founders of the qualitative approach; therefore, we could presume that those who published during the second phase and who helped to move the field forward were the initial developers of qualitative research in the social and behavioral sciences. A second wave of important contributors to qualitative research in the social and behavioral sciences emerged in the 1980s and early 1990s and included Norman Denzin, Yvonna Lincoln and Egon Guba, Matthew Miles and Michael Huberman, Michael Quinn Patton, Robert Stake, and Robert Yin.

To learn about the history of mixed methods research in the social sciences and how it has blossomed into the movement that it is today, I started by completing a literature search. Two major search engines (PsycINFO and ERIC) were used to find articles. With these search engines, the key words *mixed methods* and *history* were combined using the Boolean logical operator AND. I searched for articles between the years of 1960 and 2009. The initial search using PsycINFO yielded 185 articles, and using ERIC only 3 articles. False hits (i.e., articles not reporting on mixed methods research), duplicates between databases, empirical articles, dissertations, books, book chapters, and unpublished papers were deleted. A further criterion used for inclusion included the following: The article needed to include specific information on the history or the beginning of mixed methods research. After this deletion, only six remained (i.e., Capraro & Thompson, 2008; Gelo, Braakmann, & Benetka, 2008; Giacobbi, Poczardowski, & Hager, 2005; Greene, Benjamin, & Goodyear, 2001; Leahey, 2007; Plano Clark, Huddleston-Casas, Churchill, Green, & Garrett, 2008). Of these articles, none discussed the beginnings of mixed methods research beyond the qualitative and quantitative incompatibility thesis (Howe, 1988). A few articles did not come up in the search (i.e., Johnson et al., 2007), even though they include information on the history of mixed methods. Thus, information from these articles is incorporated throughout this chapter.

Recently, a few texts (Creswell & Plano Clark, 2007; Greene, 2007; Ridenour & Newman, 2008; Teddlie & Tashakorri, 2003, 2009) have included a chapter or two exploring the history of mixed methods research. None of these authors explain in depth what really happened to spark the widespread interest in mixed methods research. After reading these histories, I was left feeling that more detective work was needed; specifically, I was interested in learning more about the

past, present, and future of mixed methods research from those who were involved in the early days.

I decided to search for and interview individuals who made major contributions to developing mixed methods research in the last 10 to 15 years of the 20th century, when the field was emerging. Therefore, I began a search for authors from both the United States and Europe whose mixed methods works from that period were cited frequently.

### ◆ *The Early Developers— Who They Are*

Working with the co-editors of this *Handbook*, I identified the following scholars as individuals who significantly contributed to the beginning of the field of mixed methods research: Julia Brannen, Alan Bryman, John Creswell, Jennifer Greene, David Morgan, and Janice Morse. Each of these individuals was contacted via e-mail and asked to interview for this chapter. Dr. Morgan and Dr. Brannen were not available to participate in the interviews. (Brannen's viewpoints may be seen in Chapter 26 of this volume, which she co-authored). To better understand who the early developers are, a short biography of each is presented in the remainder of this section.

Alan Bryman graduated from the University of Kent at Canterbury in 1971. He has taught several different content courses (e.g., organization studies, sociology of work) along with research methods. As early as 1984, he had an article in which he discussed the debate between quantitative and qualitative research. In 1988, Professor Bryman authored *Quantity and Quality in Social Research*. Since August 2005, Professor Bryman has been professor of organizational and social research, School of Management, University of Leicester. Recently, he has written two chapters on mixed methods research (Bryman, 2008a, 2008b).

John Creswell graduated with a doctorate from the University of Iowa in 1974.

In 1994, he authored *Research Design: Qualitative and Quantitative Approaches*. He is currently professor of educational psychology and was the founding director of the Office of Qualitative and Mixed Methods Research at the University of Nebraska–Lincoln. He has taught several topics, including content courses (e.g., administration, higher education) and research methods, including qualitative research, survey methods, and mixed methods research. He is the founding co-editor of the *Journal of Mixed Methods Research (JMMR)*. In 2007, Dr. Creswell co-wrote one of the best-selling texts on mixed methods research (Creswell & Plano Clark, 2007).

Jennifer Greene received her doctorate from Stanford University in 1976. In 1985, she published two articles on mixed methods research, both on triangulation (Greene & McClintock, 1985; McClintock & Greene, 1985). In 1989, she published one of the most cited early articles on mixed methods inquiry: the article discussed conceptual frameworks for mixed methods evaluation designs and reviewed a sample of 57 empirical evaluation studies to assess the empirical warrant for and meaningfulness of these frameworks (Greene, Caracelli, & Graham, 1989). Since 1999, she has been professor in the Department of Educational Psychology at the University of Illinois at Urbana-Champaign. Dr. Greene has taught inquiry methods (including mixed methods inquiry), measurement, and evaluation courses. In 2007, she published a book on mixed methods social inquiry.

Janice Morse graduated in 1981 from the University of Utah with two PhDs, one in nursing and one in anthropology. In 1991, Dr. Morse published one of the first articles focusing on triangulation in mixed methods research, developing the notation for describing mixed method designs. She learned mixed methods by doing research—both qualitatively and quantitatively driven—and has held research career awards. In 1997, she founded the International Institute for Qualitative Methodology (IIQM) at the

University of Alberta, Canada, and she has taught a large number of workshops internationally on various mixed method designs. From these courses, she published (with Linda Niehaus and others) a number of articles that developed the principles and processes of mixed methods research. Since 2007, Dr. Morse has been professor in the College of Nursing and holds the Barnes Presidential Endowed Chair. In 2009, she co-authored a book on mixed methods research entitled *Principles and Procedures of Mixed-Method Design*.

### ◆ *Interviews With the Early Developers*

Table 11.1 presents the questions that were asked in the interviews. The questions were focused into four general areas: orienting questions and queries about the past, the present, and the future of mixed methods research. On request, the initial questions were e-mailed to the participants. A few follow-up questions came up during the interviews, and some of these questions were then asked in subsequent interviews with others. All of the participants were given the opportunity to read early drafts of the chapter and make appropriate changes so that their viewpoints are accurately portrayed.

The responses from the early developers are presented in no specific order. Quotes from the interviews are included to give the reader a flavor of each of the interviews.

#### ORIENTING QUESTIONS

*Question 1.* What is your definition of mixed methods research?

Interestingly, two of the early developers used the word *philosophy* in their definition. Creswell stated that mixed methods research starts with understanding that a person's method is tied to that person's

**Table 11.1** Interview Questions

	<i>Interview Questions</i>
<i>Orienting questions</i>	<p>What is your definition of mixed methods research?</p> <p>Do you feel like a founder of mixed methods research?</p>
<i>Past</i>	<p>How did you become interested in mixed research?</p> <p>What was your education like? How long ago was your education?</p> <p>Were both qualitative and quantitative methods valued? After learning about (qualitative/quantitative) research, how did you learn about the other approach?</p> <p>What was/is your passion for mixed research?</p>
<i>Present</i>	<p>What ideas or thoughts regarding mixed research have you had that are not readily reflected in the writings?</p>
<i>Future</i>	<p>Where do you see the field of mixed research moving?</p> <p>What problems do you see in mixed methods research?</p> <p>What are your hopes for the field of mixed research?</p>

NOTE: Questions that were added after the initial planning of the interviews are in italics.

philosophy. He thinks it is the reflection and analysis of both quantitative and qualitative data and the integration of these two data sources. The design is framed within a larger philosophical foundation that is made.

Similarly, Greene defined mixed methods research as the

intentional use of more than one method, methodology, and/or methodological tradition in the same study or program of research. Methodological traditions include the assumptions of philosophical paradigms, as well as disciplinary and theoretical perspectives. And mixing can occur on some or all of these levels, although I believe that mixing at multiple levels offers the greatest possibilities for deeper, broader, and more insightful understanding. My mixed methods ideal is to catalyze respectful conversations across these different ways of generating and valuing knowledge.

The other two initial developers, Morse and Bryman, did not mention philosophy in regard to the definition of mixed methods research. Morse stated that mixed methods research can be defined as

using one method that's very solid and complete and a second supplementary component [that] is not complete and won't stand alone to solve a research problem. Some others may call *mixed methods* what I call *multiple methods*—where both methods are complete in themselves and could be published as two articles, each in a separate journal. Mixed methods may be qualitative and quantitative, or both qualitative, or both quantitative.

Bryman, later in his interview, implied that philosophy and paradigms do not really play a role in mixed methods research because it is strictly a method. Thus, his definition of mixed methods research was

“research that entails the collection and analysis of quantitative and qualitative data within a single project.”

*Question 2.* Do you feel like a founder of mixed methods research?

Initially, we (the co-editors and I) thought to call those who helped originate mixed methods research *founders*. Based on feedback from the participants, we changed the name to *early developers*. Some participants said they did not feel like a *founder* because the mixing of methods had occurred prior to their writings.

#### THE PAST—WHY THEY BECAME INVOLVED WITH MIXED METHODS RESEARCH

*Question 3.* How did you become interested in mixed methods research?

After the interviews began, other questions were added so that more specific information could be obtained. Thus, this question turned into the following five questions:

How did you become interested in mixed research?

What was your education like?

How long ago was your education?

Were both qualitative and quantitative methods valued?

After learning about (qualitative/quantitative) research, how did you learn about the other approach?

Morse started her research career as a student at Penn State, working on a master's degree in a program that was exclusively quantitative. She had a project that would have been best completed using a qualitative or mixed methods approach, but because of the program's quantitative

focus, she conducted the project from that perspective. At the University of Utah, where she worked on her PhDs in nursing and in anthropology, there was a high level of both statistics and qualitative methods in the programs. She considers her grounding to be initially in quantitative, but then she learned qualitative shortly thereafter. One of her dissertations is quantitative with a minor qualitative component (anthropology), and the other is qualitative with a minor quantitative component (nursing). When she graduated with her two doctorates, she was adept at both methods, believing that there was a fit between the research question and the method, and the methods were simply tools for conducting inquiry. She tried not to “prefer” either quantitative or qualitative, and her students also used mixed method designs when studying such topics as infant behavior, touch, or styles of nursing care.

“By accident” is how Bryman says he became interested in mixed methods research. In the 1980s, he was writing his acclaimed book, *Quantity and Quality in Social Research*, where he outlined both quantitative and qualitative approaches, discussed philosophical issues, and talked about paradigms.

As I was reading, I realized I was encountering quite a number of significant studies where people had combined quantitative and qualitative research, so I thought, “Ah, it would be a good idea to have a chapter in the book that discussed the findings of studies where the two had been combined and to examine the different ways in which they had been combined.”

The chapter included an outline of 10 different ways quantitative and qualitative research had been combined in past research studies. According to Bryman, “although that chapter was very much an afterthought, it was actually the chapter that attracted the most attention.” Even

though he did not take any research methods courses, Bryman feels that he was brought up in the quantitative research tradition. In the early 1970s, his first job was as a research assistant using quantitative methods. When he obtained his first teaching position in sociology in 1974, he was asked to teach research methods and became an expert on research methodology. In the late 1970s, he began introducing qualitative research in his courses.

Creswell received his PhD in 1974 at the University of Iowa in quantitative methods and used those methods in his dissertation. In 1983, he began teaching a course on developing the dissertation. For the first 5 years, more and more students wanted information on both qualitative and quantitative research methods, so he incorporated both into the course, which led him to think about how to combine the two methods. In 1985, he learned how to do qualitative methods by teaching a qualitative methods course. Between 1988 and 1989, he wrote a chapter on combining the two, which came out in his 1994 research text (Creswell, 1994). In 1991, at the American Education Research Association's conference, he went to a presentation by a graduate student who used "mixed-methods research" (with a hyphen between mixed and methods). He was the only person in the audience, and he thought, "this will be the research of the future" and will "bridge/span across qualitative and quantitative research." Creswell's book, *Research Design: Qualitative and Quantitative Approaches*, became a best seller in 1995; he believes its popularity was due to the chapter on mixed methods research.

For Greene, "It's been my own intellectual journey" to probe the possibilities of mixed methods social inquiry. She attended graduate school in the 1970s, when there was only one type of methodology to learn (i.e., objectivist quantitative research methodologies). Her first job was in a research and evaluation center, and the quantitative methodologies she had learned

in graduate school did not "work very well in the real world." At the same time, qualitative research methodologies were becoming more popular, so, on her own, she learned qualitative methodologies and their accompanying philosophical frameworks. When she got a job where she had to teach qualitative methodologies, she had to "really learn" them and became a "convert and champion of qualitative methods for a number of years." Being an evaluator, she appreciated qualitative methods; yet, she came to realize that "they don't claim much voice on the policy stage, so I wanted to speak louder, retain the promise and potential of qualitative methods, but speak more loudly." After working with colleagues where she undertook the qualitative portion of the evaluation study and the others did the quantitative portion (Greene & McClintock, 1985; McClintock & Greene, 1985), she was intrigued and realized the value of mixing the two methods. She found that "this is really fun!"

*Question 4.* What was/is your passion for mixed methods research?

When asked about passion for mixed methods research, Bryman stated,

I am not actually passionate about mixing the two [qualitative and quantitative methods]. There is a sense in which I tend to view that you should always consider what is the most appropriate methodological approach for the research problem. . . . For many research problems, mixed methods approach is either unnecessary or even inappropriate.

He does feel passionate about "the neglect of qualitative research by some social scientists who ignore it and treat it as some kind of lesser form of life." He states that his thought about research methods is summed up in the British expression of "horses for courses," which

means one should use the right horse for the right course. Professor Bryman is a pragmatist: “It’s all to do with tailoring your methodological approach to the research problem.”

Morse put it very simply: Her passion for mixed methods research came from having research problems that fit mixed methods research.

Greene feels “intellectually passionate but cautious” regarding mixed methods social inquiry. She is “cautious of somehow advancing mixed methods as better than any other way to do inquiry . . . we should be very mindful of the times when we should not do a mixed methods study.” She feels we should be modest in championing a mixed methods inquiry approach and “careful about claiming some promised potential, wonderful things about mixing methods that we don’t really know ourselves at this point.” She feels mixed methods researchers and evaluators need to remain respectful of other traditions. According to Greene, “I do not think mixed methods is going to take over all social research. We are joining a long respected family, and we are the newcomer and we should be respectful of our elders.”

Creswell’s work focused on “the types of mixed methods designs that are out there.” When he wrote a chapter for the first edition of the *Handbook of Mixed Methods Research* on types of advanced mixed methods designs (Creswell, Plano Clark, Gutmann, & Hanson, 2003), he was motivated by the concept of visual diagrams for the designs and challenges in designs; he wanted to encourage researchers to think in terms of designs for mixed methods research studies. After working as an editor of *JMMR*, his interest has “shifted to a broader picture . . . to look at the topic within the field of mixed methods research, not necessarily the empirical area but the broader topic of methodological topics . . . that have begun to emerge and to map that area.”

## REFLECTIONS ON THE PRESENT OF MIXED METHODS RESEARCH

*Question 5.* What ideas or thoughts regarding mixed research have you had that are not readily reflected in the writings?

In general, Jennifer Greene feels her ideas are well reflected in her writings. One reason she feels passionate about mixed methods is that

mixed methods is an important opportunity to engage with difference. I draw a parallel between intellectual engagement with different ways of knowing and different philosophical and methodological traditions and a political or value-based engagement with differences that exist in the phenomena we study. . . . That’s the source of my passion.

Professor Bryman feels that we have a good understanding of how to conduct mixed methods research. He cited many leading mixed methodologists (i.e., Creswell, Tashakkori, Morgan, Brannen, Teddlie) and how these methodologists have advanced the field of mixed methods research. Yet, he believes that we still do not have a good understanding regarding how to present and write about mixed methods research:

What we need now is really to get a good understanding of what good mixed methods research articles are supposed to look like and develop some exemplars of what the right kind of way of writing up mixed methods research might be.

Professor Bryman feels that the arrival of *JMMR* has been a good beginning, which has increased our understanding of what a mixed methods article should look like.

Creswell identified three areas of concern. First, many of the articles submitted to *JMMR* are lacking information on how the article will add to the discussion of mixed methods research literature. Most



people “are just not familiar with the literature.” The issue, then, is how to educate authors regarding the existing literature in mixed methods research. Second, authors struggle with the writing of mixed methods research. He said, “I see myself as a writer” and “I have a strong interest in the writing of mixed methods research,” including how to propose and stage a study. Furthermore, he is intrigued by “writing with a transformational lens.” Finally, having watched the evolution of qualitative research in the 1980s and the differences that arose between scholars within and outside the United States (what he calls the Atlantic divide), we should try to avoid the creation of an Atlantic divide for mixed methods researchers. His solution to this issue is to go to all conferences on mixed methods research, inside the United States and abroad, and to collaborate with colleagues from around the world. He feels it is important to “not view mixed methods as an American methodology; it is a worldwide language.”

According to Morse, there is not enough information telling researchers how to “actually do mixed methods” research. The current mixed methods research texts do not “provide you with principles, strategies, or guidance.” As a solution to this, she recently wrote a book on mixed methods research that is, “at last, a book that hopefully tells you what to do.”

#### *THOUGHTS ABOUT THE FUTURE OF MIXED METHODS RESEARCH*

*Question 6.* Where do you see the field of mixed research moving?

Bryman replied,

I really find that a difficult question . . . in a sense I don't regard it as a field, I kind of think of it as a way of thinking about how you go about research. So, I don't have a strong feel or a strong sense

of where it ought to be going or might be going. . . . People, perhaps, need to be more kind of innovative in their thinking about the methods that can be combined.

Bryman sees most mixed methods research as including some type of survey with a semistructured interview/focus group. His content analysis indicated that “55 to 60% of all of the articles included that combination . . . that really is quite a restriction.” He wonders why we do not have more mixed methods research articles with discourse analysis or experimental design. He says “there are numerous possibilities out there.” He hopes that researchers will begin to think more innovatively about available combination possibilities. Some of this “will have to come from people who are not necessarily in the mixed methods community.” He uses the example of researchers who use discourse analysis in their research, who may come up with a quantification that can stem from the discourse analysis. This addition of the quantification will enhance the discourse analysis.

Morse believes there “has to be some kind of agreement about terminology, and the language of mixed methods needs to be further developed.” Furthermore, research designs need to be agreed upon and clarified.

Greene shared her fear of where mixed methods inquiry is moving:

We are moving toward some kind of convergence. Some kind of settling of difference . . . and will emphasize a technical level of methodology. It will be about technique—step one, step two, step three—it will be that kind of technique. It will be reduced . . . the wonder that is possible in mixed methods will be reduced to procedures and techniques.

She hopes we are not moving in that direction, but she is fearful that we may be.

Creswell, who has been conducting mixed methods research workshops for the past 7 years, has recently observed a change in what the workshop attendees are seeking. In the initial workshops that he conducted, everyone wanted simply to be introduced to mixed methods research. Recently, there has been a “dramatic shift”: The workshop attendees want to know “how do I do this study.” They need good examples of mixed methods studies, where they can see the procedures for conducting the study and understand the challenges of doing mixed methods research. He likens the stage that mixed methods research is currently in with the development of a textbook. Using the example of Keppel and Wickens (2004), Creswell explains that the first edition was not presented as well as the later editions:

With each edition, they build in a little bit more technical competence . . . the understanding of how to do it, clarifying examples are much better. To me that is an example of where mixed methods is going. Our technique will become better and become clearer.

Creswell also speaks of “the possibility of a growing gulf between the methodologist type and the philosopher type.” As the methodologists become more adept and the philosophers come up with more assumptions, there may be more of a divide between these two groups. Also, whoever develops a software package to do mixed methods research “will have a gold mine,” he says. The prime movers in the field of mixed methods research are graduate students, as they are the majority of the people who are attending mixed methods research workshops and are “looking for new ways of doing research and are not afraid of trying out new methodology.” He believes that graduate students will then be helping existing faculty, “who are more steeped in their traditional ways of doing research,” understand and learn mixed methods research.

*Question 7.* What problems do you see in mixed methods research?

Initially, this was not one of the questions for the interviews. After starting the interviews, it was clear that this issue was on each of the early developers’ minds. Therefore, it was added as a question for subsequent interviews.

Morse identified several problems with mixed methods research. First, “why can’t we have a singular language? . . . [W]e have the opportunity to develop something that is cohesive.” Second, “people think it is hard—it’s not hard. It’s so easy it’s like falling off a log.” To make it easy, according to Morse, mixed methods researchers need to attend to sampling, understand their “theoretical drive”—whether they are working inductively and deductively—and focus on the “point of interface,” which is where the researcher brings the components of the study together. She feels that “we are moving into chaos. We, who are in the field, should have enough sense to say, ‘Let’s pull together on this.’”

Greene does not necessarily see problems with mixed methods inquiry, but she does believe the “range of views in the field make it full of rich conversations, but messy.” She is not sure if Teddlie and Tashakkori’s (2003) perception of mixed methods research being in its adolescence is quite right; she feels that the field of mixed methods inquiry may not be that far along yet. Greene thinks we are still in a stage where things will be challenging, and we should “frame the differences and challenges as opportunities for further learning and further conversation and further discourse.” She uses the example of pragmatism:

[It] would be very much too bad, [though] not a problem [per se,] . . . if everybody agreed that pragmatism was *the* paradigm for mixed methods research. . . . [W]e don’t have very much enough information *at all* on what it means to do a study from a philosophically pragmatic standpoint. . . . What does it mean to have a

transactional view of reality? What does it mean to have a consequential view of truth? What does that look like in the studies that we do? Because I think the mixing of different ways of knowing and the engagement with difference is the most fun part of mixed methods, I think it would be too bad if we closed down that conversation already and everybody just agreed. . . . Let's not try to settle everything. Let's keep this conversation open and dynamic and respectful of the different positions that exist.

She has observed that some federal agencies are open to mixed methods research studies in their requests for proposals, which gives mixed methods inquiry more legitimacy.

The problems that Creswell identified throughout the interview included that authors seem not to know the mixed methods literature and not to have computer software that can conduct mixed methods analysis. When directly asked the question about problems in mixed methods research, he stated that there are many controversies. The first is how to conduct mixed methods research with an interpretive approach and attempt to ensure that "qualitative researchers do not feel marginalized" in mixed methods research. Another controversy, according to Creswell, is how mixed methods will be used in "gold standard," experimental, randomized studies.

When asked about problems in mixed methods research, Bryman said "ghetto-ization":

[It] is the possibility that the mixed methods community [might] seal itself off from the wider social science community and end up talking to each other rather than beyond. The arrival of specialist journals and conferences raises this prospect. I'm not saying it is something that will or would happen but that there is that possibility. It can be seen, for example, in the field of conversation analysis (CA) where CA practitioners have to a very significant

extent become like a cult with sacred texts (e.g., Harvey Sacks's lecture notes) and specialist journals, conferences, and online communities.

He feels that the idea of a "mixed methods movement" is a good term, as there should be "proselytizing": We should try to get more converts to mixed methods research by giving papers and publishing in mainstream journals. He says,

I like the idea of construing mixed methods as a *movement*, but on the other hand, I would not like it to become like a cult, where people only talk to each other. And I do see that as a potential danger. . . . [T]here is so much that mixed methods offers in terms of enhancing the social sciences and methodological understanding more generally, that really we ought to make sure that we don't just talk to each other, but we talk more widely.

*Question 8.* What are your hopes for the field of mixed methods research?

Greene stated that she hopes that the "interest and growth in [the] field will continue in a divergent way for a while." She has enjoyed reading the conceptual and empirical work of those researchers and evaluators who are mixing in new ways and with new types of data (e.g., GIS mapping with census data analysis). She suspects that it may be uncomfortable for those who are uneasy with "ambivalence and messiness. . . . [M]y hope is that it will continue to be messy for some time."

Bryman's hopes for mixed methods research include that "more and more people realize its potential and that it becomes more mainstream." An issue for mixed methods researchers that he has found is to answer the question "What constitutes good quality mixed methods research?"

I came across [articles] and it was dire, it really was atrocious . . . where you would get "here are my quantitative findings and

here are my qualitative findings, would you mind, please Mr. and Mrs. Reader to work out yourself what the overall meaning of this is? . . . do the mixing for me.” . . . I think that is unacceptable.

Bryman is not suggesting that the problem is specific to mixed methods research (quantitative and qualitative research also have articles that are “dire”). He believes that it would be helpful for emerging and established scholars to “have some articulation of what the . . . basic requirements are of a mixed methods article.” There has been some writing in this area (Bryman, Creswell and Plano Clark, Tashakkori and Teddlie). He does not think the matter needs to be “slavish conformity to strict criteria,” but we need to explain what we are looking for in regard to a good mixed methods article. Bryman thinks “we are making some headway, but we are reaching a point where we perhaps need to synthesize this and think a little bit more about what constitutes a good, rigorous, mixed methods article.”

Morse started her answer this way: “I am sorry it has ended up in this kind of a mess” due to “books that . . . are not peer reviewed.” This misinformation causes confusion for students and researchers and promotes researchers to conduct studies that are called “mixed methods research” but do not have steps that are clearly delineated. She hopes the field, in the future, figures out how to conduct mixed methods research.

Creswell suggests, “If you view mixed methods as a method, collecting qualitative and quantitative data . . . people are using other designs, collecting both qualitative and quantitative data and using them” in many types of research, including case study research, experimental research, and narrative research. He states that “if you want to get a person to adopt a new idea, or adapt your approach, it should be an add-on to what they are already doing. The potential now for mixed methods is streaming across many methods.”

### ◆ *The Early Developers: Distinctions and Connections*

After completion of the interviews, I found there were interesting results and surprising findings: It was clear that the early developers of mixed methods research agreed on some topics and that they viewed some matters differently. From these thoughts, five main distinctions and eight connections were identified. In a few cases, content differed in the interviews; thus, comparisons are at times only between a subset of the participants.

#### *DISTINCTIONS*

Five main distinctions were readily apparent after completion of the interviews. These included definitions of mixed methods research, whether to stay in a “messy” place or to find agreement, whether to keep our conversations among ourselves, what philosophical viewpoint mixed methods researchers should adopt, and guidance for conducting mixed methods research. Each of the five distinctions will be briefly discussed.

*Distinction 1. Definitions of mixed methods research.* Before the interviews, I had a few assumptions about what kind of information I would find. One of my assumptions was that the early developers would define mixed methods research similarly. Johnson et al. (2007) found similarities and differences in their investigation of how leaders in the mixed methods field defined mixed methods research. These authors said, “We hoped to find some consensus about the core of mixed methods research, and we did” (p. 123). I thought that the early developers might not have the exact same definition but that the foundation of their definitions would be similar enough there would be no need to include a question about their

definition of mixed methods research. Yet, a few minutes into the first interview, it was evident that there was a need to step back and find out exactly how each participant defined mixed methods. As this question was not planned, the participants did not have the question in advance. Therefore, interestingly, many of the early developers had to stop and think before responding.

As previously noted, two of the early developers (Creswell and Greene) used the word *philosophy* in their definition, whereas Morse and Bryman did not. This is intriguing, as one issue that was striking between the initial developers was that some viewed mixed methods as mixing in all areas, including philosophy (i.e., Greene), whereas Bryman viewed it solely as a methodology. Furthermore, whether multiple forms of data (both qualitative and quantitative data) are necessary stood out in the definitions. Both Bryman and Creswell indicated that both types of data are needed in a mixed methods study. Morse's definition of mixed methods was even more different from the others' definitions, in that with her definition a mixed methods study could have two qualitative components (and thus, only qualitative data), two quantitative components (with only quantitative data), or a qualitative and a quantitative component. Greene's definition mentions mixing at many levels. Although she did not explicate the type of data needed, her definition implies the mixing of different kinds of data—spatial and numeric, or graphic and textual—that are gathered with different kinds of methods.

In 2007, three of the early developers (i.e., Greene, Morse, and Creswell) contributed their definitions of mixed methods as part of a research project conducted by Johnson and his colleagues. When I asked Greene for her definition, her first reply was, "What did I say when they did that article?" From this, I thought it may be interesting to compare the definitions of mixed methods research in the Johnson et al.

(2007) article with the definitions gathered during the interviews. Greene's and Morse's definitions were very similar in both the article and my interviews. Conversely, Creswell's definition was somewhat different. In the 2007 article, his definition was "Mixed methods research is a research design (or methodology) in which the researcher collects, analyzes, and mixes (integrates or connects) both quantitative and qualitative data in a single study or a multiphase program of inquiry" (p. 119). The striking difference from his interview definition is that *philosophy* is not included in 2007, yet, it seems to play an important role in his definition in the interview. This difference speaks to the possible change in trends in the field of mixed methods research. Philosophy and its role in mixed methods research has been a topic of discussion for quite some time (Greene & Caracelli, 2003; Maxcy, 2003; Tashakkori & Teddlie, 1998) and has continued to be discussed in the literature (Bazeley, 2009; Greene, 2009; Perla & Carifio, 2009). Perla and Carifio (2009) said, "Without some understanding and appreciation for the epistemic and philosophic issues that surround a particular methodology or paradigm, it becomes easy to create superficial distinctions of method that upon careful examination migrate to one end of the same spectrum" (p. 41). Recently, Bazeley (2009) concluded that we need to move "on from a literature dominated by foundations and design typologies" to focus on "advances in conceptualization and breakthroughs derived from analytic techniques that support integration" (p. 206). Yet, there was not agreement on this issue when talking with the early developers; some are ready to move on, while others are not.

*Distinction 2: To stay in a "messy" place or to find agreement.* All of the early developers stated, in one fashion or another, that currently the field of mixed methods research is "messy." Yet, interestingly, there was no agreement on whether the

field is ready to become more organized and systematic. Greene believes that the field of mixed methods research is not ready to come to consensus. Furthermore, she believes that if we did arrive at some type of agreement any time soon, we would lose important facets of mixed methods research. On the other side is Morse, who would like the field to come to consensus, in particular with terminology, and thinks we need to work together to do so.

*Distinction 3: Whether to keep our conversations among ourselves.* One distinction between the early developers that was curious to me was where conversations should take place and who should be included. Morse, Creswell, and Bryman discussed the need to involve researchers from across the world. Creswell outlined how he is attending all conferences on mixed methods and believes in the need for an international mixed methods association. From her role in the IIQM, Morse has presented internationally; her articles have been translated into Japanese; and her co-authored book is already being translated into Korean. In contrast, Bryman is concerned about the field becoming a cult, where only the members are included in discussions.

*Distinction 4: What philosophical viewpoint mixed methods researchers should adopt.* As noted earlier, there has been discussion regarding philosophical viewpoints and mixed methods research (Bazeley, 2009; Greene, 2009; Perla & Carifio, 2009). A striking difference between Greene and Bryman was that the latter clearly stated that he is a pragmatist<sup>4</sup> and that he conducts research (including mixed methods studies) from this standpoint. One of Greene's major concerns is the current press to adopt a philosophical stance of pragmatism as the mixed methods paradigm or framework. She is unsure that we currently know enough about the pragmatic viewpoint and what it means for mixed methods research.

*Distinction 5: Guidance for conducting mixed methods research.* An additional point of dissension among the early developers of mixed methods research was where the field of mixed methods research stands regarding agreement of how to conduct a mixed methods study and the language used in mixed methods research. Creswell and Morse stated clearly their belief that mixed methods researchers need guidance, including a step-by-step process for how to conduct a mixed methods study. Greene agrees with this in that students and novice researchers would benefit from this type of information; yet, she feels that experienced mixed methods researchers should be creative in their studies and should not be locked into a checklist of steps to conduct a study. Bryman also thinks we should be innovative in our designing of mixed methods research, and he believes we are past needing step-by-step guidance, as many in the field of mixed methods (he mentioned Creswell, Tashakkori, Morgan, Brannen, and Teddlie) have already clearly articulated how mixed methods studies can be conducted.

## CONNECTIONS

After the interviews with the early developers of mixed methods research, eight connections, or similarities, emerged. The connections were training, the popularity of early mixed methods chapters, when to conduct a mixed methods study, the need for innovative ideas, reaching researchers in other disciplines and countries, the maturity (or lack thereof) of mixed methods research, how to write about mixed methods research, and the need for exemplars. Each of these eight connections will be briefly discussed.

*Connection 1: Training.* All of the early developers of mixed methods research were initially trained in the quantitative tradition and three (Greene, Creswell, and Bryman)

learned how to conduct qualitative research on their own. This similarity could be based on the fact that they were all learning research in the same decade (i.e., the 1970s). During this time, quantitative research was the main type of research conducted, as the qualitative approach still “lacked a history within educational research” (Howe & Eisenhart, 1990, p. 2). Morse, coming from the disciplines of nursing and anthropology, had the fortune of taking courses in qualitative methods.

In addition, it is fascinating that all the initial developers learned qualitative methods very early in their careers. This information is evidence that having a strong foundation in both quantitative and qualitative research methods is necessary and important for conducting mixed methods research, providing support for many scholars’ beliefs regarding educating graduate students in research methods (Creswell & Plano Clark, 2007; Greene, 2007; Johnson & Onwuegbuzie, 2004; Ridenour & Newman, 2008; Teddlie & Tashakkori, 2009).

*Connection 2: The popularity of early mixed methods chapters.* Both Bryman and Creswell thought their research books, published in the late 1980s and early 1990s, became popular due to the inclusion of a chapter on mixed methods research. This phenomenon suggests that social science researchers more than a decade ago were curious about and wanting more information regarding mixed methods research. It is unfortunate that this cue was not taken more seriously so that texts on mixed methods research could have been written and available more quickly. If texts had been available, the field of mixed methods research might be in a very different place today.

*Connection 3: When to conduct a mixed methods study.* Bryman, Greene, and Morse share a belief that researchers should be cautious about when they use mixed methods in

studies. These early developers maintain that mixed methods are not always the best choice for a given study. Mixed methods research should not be categorized as the “catch-all” method for any given study. Thus, from the information learned in these interviews, it appears that researchers should be conscientious about the research question and choosing the best research approach (i.e., quantitative, qualitative, or mixed methods) to answer the research question at hand.

*Connection 4: The need for innovative ideas.* Many of the early developers believe that mixed methods research will benefit from new and innovative ideas, designs, areas of inquiry, and research strategies. Bryman believes that researchers should be innovative with mixed methods research. Creswell believes graduate students are the future of mixed methods and will create and develop innovative strategies for the mixed methods field. Greene thinks we should not limit the mixing of methods to techniques and procedures, but rather mix at levels of methodology and framework as well. She feels the magic of mixed methods research occurs when a study goes beyond the step-by-step approach. From these thoughts from the early developers, it is clear that mixed methods researchers should look beyond the available data collection, design, and analysis strategies: Mixed methods researchers should be creative and pioneering. The field of mixed methods research has room to grow and expand—we have yet to arrive at the limit of the capacity and potential of mixed methods research.

*Connection 5: Reaching researchers in other disciplines and countries.* Both Creswell and Bryman indicated the need for the field of mixed methods to include researchers from other disciplines and encouraged care not to exclude researchers from other countries. As Bryman so aptly stated, we do not want mixed methods research to become a cult where there are

gatekeepers who determine who can participate. Creswell's thoughts about the Atlantic divide brought up a valid and important concern in that mixed methods research is not a U.S.-based phenomenon; researchers from all over the world are conducting mixed methods research and should be included in the discussions as the field grows and changes.

*Connection 6: The maturity (or lack thereof) of mixed methods research.* In the first edition of the *Handbook of Mixed Methods in Social and Behavioral Research*, Teddlie and Tashakkori (2003) state, "The field is just entering its 'adolescence' and . . . there are many unresolved issues to address before a more mature mixed methods research area can emerge. Nevertheless, we also believe that the handbook . . . will stimulate greater maturity in the field" (p. 3). Six years later, all of the early developers of mixed methods research believe that the field of mixed methods research is still emerging, evolving, and messy. In some respects, this seems healthy, as the field of mixed methods research is relatively young. Yet, until the field becomes more mature and stable (i.e., terms, definitions, and designs become commonplace and similarly understood by researchers), mixed methods research will be difficult, especially for novice mixed methods researchers.

*Connection 7: How to write about mixed methods research.* One of the major needs for the field of mixed methods research is examples of how to write and present a mixed methods research study. Many of the initial developers mentioned that as editors or reviewers for journals, they have had manuscripts submitted that are supposedly presentations of mixed methods studies. In many of these, it can be difficult to know what the authors are attempting to convey, as these manuscripts are not well written. According to the early developers, areas that need attention in the writing include, but are not limited to, (a) presenting the author's definition of mixed methods research, (b) having an understanding of

how the study fits within the extant mixed methods literature, (c) explicitly stating the researcher's philosophy, and (d) explicating where the mixing occurred.

*Connection 8: The need for exemplars.* Most of the early developers felt that both emerging and established mixed methods researchers would benefit from exemplars of mixed methods studies. Based on this similarity across the interviews, as a follow-up question, the participants were asked to provide a citation for a published mixed methods article that is exemplary. Greene suggested the article by Li, Marquart, and Zercher (2000) as an example of a good mixed methods study and presentation in an article because

it demonstrates the value of careful and intentional planning of the mixing of methods. It explicates and illustrates the multiple levels on which methods can be mixed—paradigm, methodology, method/technique. It offers highly creative and innovative methods of data analysis and interpretation, which is where the important mixes actually happen.

Morse suggested her 1989 article as an exemplar mixed methods study. She diagrams this study as QUAL + *qual* + *quan* → *qual* + *qual* → *quan*. The mixing of qualitative and quantitative methods, or what she calls the point of interface, is in the results section. "The phenomena is so complex that it could not have been accessed using a single method," she said during the interview. The study is evaluated in her book (Morse & Niehaus, 2009). Creswell pointed to the mixed methods studies evaluated in Plano Clark and Creswell (2008). These articles include Luzzo (1995); Idler, Hudson, and Leventhal (1999); Donovan et al. (2002); Victor, Ross, and Axford (2004); Messer, Steckler, and Dignan (1999); Way, Stauber, Nakkula, and London (1994); Thøgersen-Ntoumani and Fox (2005); Milton, Watkins, Studdard, and Burch (2003); and Richter (1997).



## ◆ Conclusions

Having the opportunity to converse with the early developers of mixed methods research was a chance of a lifetime. Being able to have an understanding of who these people are and begin to unravel each of their unique views of mixed methods research was an amazing experience. I found the initial developers to be genuine, caring people who are scholars who have worked tirelessly to promote our field of mixed methods research.

After concluding each interview, I found certain statements made by the participants to stand out and be especially memorable. Morse's comment that "we are into *p* values" is a great example of how quantitative research is overvalued, and how we need to move further in our thinking about what kind of results are helpful. After speaking

with Bryman, his statement, "Methods can serve different masters," summed up much of our interview as well as his point of view of mixed methods research. Creswell's statement, "If you want to get a person to adopt a new idea, or adapt your approach, it should be an add-on to what they are already doing," was beneficial in that this viewpoint may assist researchers in understanding how to promote mixed methods research. Finally, Greene's thought, "Let's keep this conversation open and dynamic and respectful of the different positions that exist," clearly explicates that as the early developers see it, the field is still emerging; most of the initial developers believe conversations need to continue. The conversations from these interviews were just the beginning; the future of mixed methods research will have continued conversations that include scholars from multiple disciplines from varied areas of the world.

### Research Questions and Exercises

1. What is your definition of mixed methods research? Is it helpful to have multiple definitions, or would it be more beneficial to have one specific definition that all researchers use?
2. How has the field been enriched by the varying perspectives of the early developers? Are there negative aspects to this diversity of viewpoints?
3. In what ways (if any) does a researcher's philosophical viewpoint impact his or her research?
4. Should there be specific guidelines that researchers follow when conducting a mixed methods research study, or should researchers be creative and develop new and innovative methods?

## ◆ Notes

1. The co-editors of this volume encouraged me to conduct the interviews presented in this article and were available for further dialogue throughout the process.

2. Including only these three traditions does not indicate that other traditions (e.g., action research, participatory research, and critical social science) are not important. These

three traditions were specified to simplify the discussion.

3. The terms *genre*, *movement*, and *approach* are used interchangeably throughout this chapter.

4. Johnson et al. (2007) identify three types of pragmatists: pragmatism of the right (those who have a "strong form of realism, and a weak form of pluralism," p. 125); pragmatism of the left (those who believe in "antirealism and strong pluralism," p. 125); and pragmatism of

the middle. Bryman did not state a preference for a specific type of pragmatism.

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