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Why a Guide for Developing Mixed Methods Proposals?

Objectives

1. To be able to define mixed methods research.
 2. To develop an understanding of the advantages of mixed methods research.
 3. To describe the resources needed to engage in a mixed methods study.
 4. To be able to judge whether mixed methods is the appropriate approach for your research.
 5. To be able to discuss the components of a mixed methods research proposal.
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So, you want to conduct a mixed methods research study? Are you ready to learn about how to develop a mixed methods research proposal? If so, recognize that you are part of a growing trend and that this will be a complex undertaking. However, before you get started, there are some important issues for you to take into

consideration. First, you have to understand what is meant by the term *mixed methods*. Second, you need to know the advantages for using a mixed methods approach. Third, you need to be reflective and honest about your abilities to successfully conduct a mixed method study. Last, you need to understand the components of a mixed methods research proposal.

● WHAT IS MIXED METHODS RESEARCH?

In the past, social science and behavioral researchers have been categorized into two traditions, quantitative (using numerical representations, such as statistics, to understand phenomena) and qualitative (using non-numerical representations, such as interviews, to understand phenomena), with many viewing the two as polar opposites. However, many researchers feel that quantitative and qualitative traditions can be better viewed as a continuum rather than a dichotomy (Ercikan & Roth, 2006). It is from this perspective that mixed methods research, a third research tradition, emerged during the last few decades (Teddlie & Tashakkori, 2009). Mixed methods research can be defined as “research in which the investigator collects and analyzes data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study or program of inquiry” (Tashakkori & Creswell, 2007, p. 4). Over the years, the definition has been expanded to include multiple ways of viewing the social world (Greene, 2007) and philosophical orientations (Creswell & Plano Clark, 2011). (For a detailed discussion on the definitions of mixed methods, see Johnson, Onwuegbuzie, & Turner, 2007.)

● WHAT ARE THE ADVANTAGES OF MIXED METHODS RESEARCH?

Mixed methods approaches have been widely used in a variety of research disciplines, including the health sciences, nursing, business, sociology, psychology, and education (Creswell & Plano Clark, 2011). Their popularity continues to increase, as indicated by the prevalence of mixed methods studies in mainstream research journals as well as the creation of the *Journal of Mixed Methods Research* and the *International Journal of Multiple Research Approaches*. In addition, mixed methods courses are becoming fixtures at many universities around the world (Tashakkori & Teddlie, 2010). This increased interest in mixed

methods research has occurred because of the advantages associated with conducting mixed method research, such as the following:

- Mixed methods research allows for the examination of complex problems within a single study by providing evidence to triangulate or corroborate findings with multiple sources of evidence. For example, you can use qualitative interview data to add to or challenge the evidence from your quantitative survey data.
- Mixed methods approaches allow you the opportunity to maximize the strengths of both quantitative approaches (e.g. generalizability) and qualitative approaches (e.g. in-depth analysis of a small number of cases) while minimizing the weaknesses of both quantitative approaches (e.g. lack of participant voice) and qualitative approaches (e.g. lack of generalizability). For example, you can use qualitative data as a case study of a particular group(s) of participants that were identified from quantitative data analysis.
- Another advantage is that mixed methods research allows for the use of multiple tools. When using a mixed methods approach, researchers can use a variety of quantitative and qualitative methods as well as multiple worldviews/paradigms. Simply stated, many of the social science problems we face are complex, and therefore they require multiple perspectives and methods to help solve. A mixed methods perspective encourages the use of multiple methods and theoretical approaches.
- A practical advantage of mixed methods research is that you may increase the possibility of finding results that you can write up and publish. On the other hand, using a singular method may result in nonsignificant or unpublishable findings. For example, you may have results from the quantitative data that were not statistically significant; however, the collection of qualitative data may provide new insights as to why the results may not have been significant, thereby suggesting new approaches for both theory and future research.

WHAT SHOULD YOU CONSIDER WHEN ENGAGING IN MIXED METHODS RESEARCH? ●

As just discussed, using mixed methods research approaches provide a variety of advantages over engaging in single method approaches.

Using such an approach is very tempting to beginning researchers. However, there are a variety of issues to consider before taking on a mixed methods study. For example, you want to specifically consider your own research methods skills, time, resources, and the necessity of using a mixed methods design (see Table 1.1). Use Table 1.1 to help you to consider whether you have the appropriate resources needed to engage in a mixed methods study.

Table 1.1 What to Consider When Conducting a Mixed Methods Study

	Something To Think About	Advice
Personal Experiences and Skills		
	How well do you understand quantitative and qualitative research methods?	If you do not have an adequate background in either quantitative or qualitative research, you should consider taking additional research courses or attending research workshops.
	Do you feel confident enough in your abilities to use either a quantitative or a qualitative approach?	Before embarking upon a mixed methods study, you need to be confident in your abilities to conduct both quantitative and qualitative research studies. If you are not confident, take more courses/workshops, or get more hands-on experiences conducting quantitative or qualitative research.
Time		
	How much time do I realistically have to conduct my study?	Create a realistic timeline to help guide your study.
Resources		
	Will you need finances to pay for transcription services or to provide financial incentives for participation?	Create a budget to help determine if you can afford such services. If you can't, you will need to consider adjusting your timeline for transcribing and/or recruiting participants.

	Something To Think About	Advice
	Do you have access to the appropriate quantitative and qualitative software?	Investigate whether your organization has access to specific software packages. If you need to purchase additional software, make sure to add this to the budget. If you do not have access to the software or have funds to purchase the software, you will need to consider an alternative software package. This may require adjusting your timeline in order to account for learning a new software package.
	Do you have access to the population of interest?	Make connections and develop relationships with your population of interest while preparing your research proposal. This will help you to gain faster access to participants once you are ready to conduct your study.
Mixed Methods Design		
	Do I really need to use a mixed methods design?	Use a mixed methods design only if your research questions are best answered by this approach, and you have the abilities, the time, and the resources for such a study.
	Can I answer my research questions using a different approach?	You should answer your research questions using the simplest approach possible.

First, when choosing mixed methods research, you want to make sure that you take your personal experiences and skills into account. What is your background in both quantitative and qualitative research methods? How well do you understand these perspectives? How comfortable are you conducting quantitative and qualitative studies separately? Do you feel confident enough in your abilities that you can take either approach? If you cannot conduct quantitative research and speak to the quantitative field as well as conduct qualitative research and speak to the qualitative field, then it will be challenging to combine

the approaches. Moreover, engaging in mixed methods research requires learning a new language and methodological approach. Thus, it is necessary to consider your skill level.

Another consideration is that of time. Mixed methods research may be more time consuming than either qualitative or quantitative research alone. There may be substantial time needed for data collection, data analysis (e.g., transcribing interviews, coding qualitative data, conducting statistical analyses, data transformation, etc.), and writing (e.g., putting the quantitative and qualitative components together in a coherent fashion, etc.). You have to ask yourself: How much time do I realistically have to conduct my study? As you plan your study, you should also consider creating a timeline that includes all of the major components of the research process. This will help you to determine if you truly have the time to take on a mixed methods study. The construction of the timeline tends to be a challenging task for anyone, but sometimes it is even more difficult for the beginning researcher. In fact, a common rule of thumb on the timeline is to figure out how long you think the study will take, and then double that time. The research process almost always takes longer than planned. For this reason, it is useful to begin the process of gaining research approval from your institutional review board (IRB), the research governing board, early in the research process. (See Chapter 8 for specific IRB suggestions.)

A third consideration is resources. Before embarking upon a mixed methods study, you have to determine if you have all of the necessary resources. It is important for you to determine the financial cost of your study. Creating a budget will be helpful in guiding you through this process. Will you need to pay for transcription services? It is important to remember that transcription services can be expensive and that transcribing on your own is very time consuming. On the other hand, many researchers prefer to do their own transcribing. Yes, transcribing on your own will add time to the process, but you can also begin the process of data analysis while transcribing. So even if you are having someone else transcribe your data, it would be useful for you to do some of the transcriptions yourself. Similarly, if you use a transcriptionist, you should always double check the quality of the transcriptions by listening to the interviews while following along on the transcripts, making any needed changes. In short, transcription is a lengthy process regardless of the approach you utilize.

Other questions you should ask yourself include these: Do you need to provide financial incentives for participation? It is important for you to consider resources in terms of access. Do you have access to

the appropriate quantitative and qualitative software? If not, you may need to make software purchases. Do you have access to the population of interest? Do you have access to other researchers with skills in these research methods? It is important to consider access to all of these resources, and if you do not have access, how will you get access?

The last consideration is the need to use a mixed methods design. You have to ask yourself: Do I really need to use a mixed methods design? Can I answer my research questions using a different approach? A rule of thumb in quantitative research is that your research designs/models should be as parsimonious as possible. This suggests that you should try to answer your research questions with the simplest model possible. This same rule may apply to your decision to use a mixed methods approach. If your research questions are better answered using a single research method, you may not need to embark upon a mixed methods study.

Is a Mixed Methods Design Right for You?

When determining whether a mixed methods design should be used, it is essential to examine the purpose of the study, your explanation as to why the research is being conducted (Newman, Ridenour, Newman, & DeMarco, 2003). Understanding the purpose is necessary because it assists you in making decisions about your research methods and in developing research questions, which also play an important role in helping to determine the appropriate research methods. According to Newman et al. (2003), research studies (quantitative, qualitative, or mixed methods) are generally conducted to predict, add to knowledge, measure change, understand phenomena, test new ideas, generate new ideas, inform constituencies, and examine the past. For students, in particular, the most common reason for engaging in research is to *add to the knowledge* in a specific content area. This is the case because most dissertations are conducted with the goal of researching a novel idea within a discipline.

In addition, when engaging in a mixed methods study, a secondary purpose will be methods oriented, in that the very use of both quantitative and qualitative methods to explore a phenomenon becomes a goal. It is important to remember that mixed methods approaches have not commonly been used to explore a variety of topics in some fields. However, Greene, Caracelli, and Graham (1989) suggest that there are five additional and specific purposes for conducting mixed methods research: triangulation (using quantitative and qualitative methods to demonstrate convergence or explain a lack of convergence), complementarity

(using qualitative and quantitative methods to examine overlapping but different aspects), development (using quantitative and qualitative methods sequentially with one method informing the other method), initiation (using one method to discover or explore contradictory findings that resulted from the other method), and expansion (using one method to extend a study).

In order to help determine whether a mixed methods design is the right approach for your study, there are a series of questions you should ask yourself (see Table 1.2). The first set of questions concerns the purpose of study: Why am I conducting this study? What is the

Table 1.2 When is a Mixed Methods Study Appropriate for You?

	Questions to Consider	Answers	Suggestions
Study Purpose			
	Will I use data to attempt to triangulate, complement, develop, initiate, or expand findings?	Yes	Mixed methods is the option for you.
		No	Consider using a quantitative or qualitative approach.
Research Methods			
	Is a mixed methods approach necessary to answer my research questions?	Yes	Mixed methods is the option for you
		No	Consider using a quantitative or qualitative approach.
	Can I more effectively conduct this study using a singular method?	Yes	Consider using a quantitative or qualitative approach.
		No	Mixed methods is the option for you.
Ability			
	Do I have the skills, abilities, and resources needed to effectively conduct a mixed methods study?	Yes	Consider using a mixed methods approach.
		No	Consider using a quantitative or qualitative approach; become more proficient in quantitative and/or qualitative approaches.

goal of my study? What is the purpose of using a mixed methods approach to my study? Will I use data to attempt to triangulate, complement, develop, initiate, or expand findings? The second set of questions involves research methods: What methods are most appropriate to answer my research questions? Is a mixed methods approach needed? Can I more effectively conduct this study using a singular method? The last question concerns your ability to carry out a mixed methods study. You should be very honest when considering the following question: Do I have the skills, abilities, and resources needed to effectively conduct a mixed methods study? If you have reflected on the goals of your study, examined the research methods needed to carry out your study, evaluated your research skills, and determined that a mixed methods research design is an appropriate approach for your study, this book will serve as an essential guide to helping develop your mixed methods research proposal.

WHAT DOES A MIXED METHODS RESEARCH PROPOSAL LOOK LIKE? ●

Now that we have a shared understanding of what taking on a mixed methods study entails, it is essential that we discuss the components of a research proposal. A research proposal is a tentative plan for the implementation of your study. The research proposal consists of three major areas (introduction, literature review, and research methods) and two minor areas (references and appendices). The primary goal of the research proposal is to communicate to readers your plan for your research study. In the proposal, you make the case for your study by discussing the history, relevance, and the significance of your topic; this is considered the *introduction* section. Then you provide context for your study by connecting your topic to the current research; this is the *literature review* section. Last, you provide the detailed steps for how the study is to be conducted and the methods you will use throughout the study; this is the *research methods* section. It is also important to properly document all of your sources and citations in the *references*. In the *appendices*, you include any other relevant information that you could not discuss in the previous sections (e.g., consent forms, interview protocols, survey instruments, etc.).

In addition, the research proposal is a flexible contract between you and your stakeholders (e.g. dissertation committee, granting agency, etc.). As such, research proposals are often augmented once the research study begins. However, it is important to note that the

component or parts of a thesis, dissertation, or grant proposal are based on the local norms, rules, and accepted procedures of the particular organization involved (e.g., the mission of your department, college, or granting agency). Thus if you are writing a dissertation proposal, it is important to work with your dissertation chair, ask for advice from fellow students who have recently gone through the process, and use any guidelines that are provided. For example, most graduate programs have a thesis or dissertation guideline document or even templates that explain what the final document should contain. Make sure you acquire a copy of those guidelines early in the process and keep them handy throughout the development of your proposal. We have organized this book to match the key elements required for various research proposals (see Table 1.3).

Table 1.3 The Mixed Methods Research Proposal

Chapters or Sections of the Proposal	Chapter(s) in This Book Where the Topic is Discussed
Title Page	8
Abstract	8
Introduction	4
Background of the Study	4
Theoretical Framework	2 & 4
Purpose Statement	4
Significance of the Study	4
Literature Review	5
Specific Research Questions	3 & 5
Methods	6 & 7
Mixed Methods Design/Definition	6 & 7
Participants	7
Data Collection	7
Data Analysis	7
Data Integration	7
Validity/Trustworthiness	7
Reliability/Credibility	7
References	8
Appendices	8

You have now considered your need to take a mixed methods approach to your study and your ability to conduct a mixed methods study. In addition, you have become aware of the major components of a research proposal. Are you ready to begin crafting a mixed methods research proposal? If so, this book will assist you on your journey. We are ready to guide you through the process and provide examples from our own research, just in case you get lost along the way. Good luck and have fun!

PRACTICE SESSION

Guided Questions

As you begin to reflect upon your mixed methods study, think about the following questions:

1. What is your experience with quantitative and qualitative research? Do you feel comfortable conducting both quantitative and qualitative research?
2. Are you familiar with mixed methods designs? Do you feel confident engaging in a mixed methods study?
3. What is your timeline for implementing your research study? Can you effectively conduct a mixed methods study within that time frame?
4. Is a mixed methods design necessary for your study? Are there other approaches you can take for your study?

Self-Assessment Activity: Are You Ready For A Mixed Methods Proposal?

This activity will give you a basic assessment of your readiness to begin developing a mixed methods proposal. In addition, the activity will help you to begin thinking about all of the resources you may need to complete a mixed methods study. It will be important for you to use this assessment when you talk with your dissertation chair (or other guiding authority) about making decisions regarding where you need more training and if mixed methods is the best path for you.

It is important to note that these issues will need to be revisited once the proposal has been developed, because your initial responses may evolve as a result of your actual mixed methods proposal development. Specifically, the issues of budgeting and time will be revisited in Chapter 8.

Assessment Areas	Questions to Consider	Responses
Skills		
	What quantitative data collection and analyses are you proficient in?	
	What qualitative data collection and analyses are you proficient in?	
	What is your experience with mixed methods research?	
	What research skills do you need to acquire before attempting a mixed methods research study?	
	What software packages are you proficient with?	
Resources		
	Do you have access to relevant software packages? If so, which software packages? If not, what would you like to have access to?	
	Do you have access to relevant populations of interest?	
	Do you have assistance for data collection and analysis (if applicable)?	
Potential Budget Needs		
	Do you envision compensating participants for their participation in your study?	
	Do you need to purchase software?	
	Do you envision paying for transcription services?	
	Do you need to pay assistants for data collection and analysis (if applicable)?	
Tentative Timeline		
	How long will it take to get your study approved?	
	How much time do you have to conduct your study?	
Overall Assessment	Do you feel adequately prepared to begin developing a mixed methods research proposal? If not, what do you need to do in order to become prepared? When will you be prepared?	

Additional Readings on Mixed Methods Research and Proposals

For more readings on mixed methods research and research proposals, see the following:

Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed). Thousand Oaks, CA: Sage.

Locke, L. F., Spirduso, W. W., & Silverman, S. J. (2013). *Proposals that work: A guide for planning dissertations and grant proposals* (6th ed). Thousand Oaks, CA: Sage.

Morgan, D. L. (2014). *Integrating qualitative & quantitative methods: A pragmatic approach*. Thousand Oaks, CA: Sage.

Ogden, T. E., & Goldberg, I. A. (2002). *Research proposals: A guided to success* (3rd ed). Salt Lake City, UT: Academic Press.

Punch, K. F. (2006). *Developing effective research proposals* (2nd ed). Thousand Oaks, CA: Sage.

Tashakkori, A., & Teddlie, C. (2010). *Handbook of mixed methods in social and behavioral research* (2nd ed). Thousand Oaks, CA: Sage.

Teddlie, C. & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. Thousand Oaks, CA: Sage.

Sample Session

We are interested in conducting a study of African American college students' experiences with racial microaggressions (conscious or unconscious negative gestures and/or statements that convey hurtful messages regarding racial minority group membership) within the college context. (For more information on racial microaggressions, see Sue, Capodilupo, Torino, Bucceri, Holder, Nadal, & Esquilin, 2007). Below is the self-assessment we used to determine if we are ready to develop a mixed methods proposal. Because we are a team on this particular research project, we have combined our information on this table. What is listed below is what we both bring to the table for this project.

Assessment Areas	Questions to Consider	Responses
Skills		
	What quantitative data collection and analyses are you proficient in?	ANOVA; multiple regression; EFA/CFA; SEM
	What qualitative data collection and analyses are you proficient in?	Thematic content analysis; narrative analysis; counterstorytelling

(Continued)

(Continued)

Assessment Areas	Questions to Consider	Responses
	What quantitative data collection and analyses are you proficient in?	ANOVA; multiple regression; EFA/CFA; SEM
	What qualitative data collection and analyses are you proficient in?	Thematic content analysis; narrative analysis; counterstorytelling
	What is your experience with mixed methods research?	Years of experience teaching mixed methods research; published writings regarding mixed methods research; conducted several mixed methods research studies
	What research skills do you need to acquire before attempting a mixed methods research study?	None
	What software packages are you proficient with?	Quantitative software: SPSS; SAS; LISREL; AMOS Qualitative software: Atlas.ti
Resources		
	Do you have access to relevant software packages? If so, which software packages? If not, what would you like to have access to?	Yes—SPSS; SAS; AMOS; Atlas.ti
	Do you have access to relevant populations of interest?	Yes—college students
	Do you have assistance for data collection and analysis (if applicable)?	Yes—graduate students
Potential Budget Needs		
	Do you envision compensating participants for their participation in your study?	Maybe

Assessment Areas	Questions to Consider	Responses
	Do you need to purchase software?	No
	Do you envision paying for transcription services?	Maybe
	Do you need to pay assistants for data collection and analysis (if applicable)?	Maybe
Tentative Timeline		
	How long will it take to get your study approved?	4–6 weeks
	How much time do you have to conduct your study?	6–12 months
Overall Assessment	Do you feel adequately prepared to begin developing a mixed methods research proposal? If no, what do you need to do in order to become prepared? When will you be prepared?	YES!