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Procedures and Practice of Mixed Method Design: Maintaining Control, Rigor, and Complexity

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Procedures and Practice of Mixed Method Design: Maintaining Control, Rigor, and Complexity

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Objectives

Tools

On this page

After completing this chapter, you should be able to

- define what mixed method design is and is not and to differentiate it from multiple method design;
- understand the importance of the armchair walkthrough and of diagramming;
- define the major components of mixed method design: the theoretical drive, the core component, the supplemental component, pacing, and the point of interface; and
- explain the major principles for maintaining rigor in mixed method design.

AUTHOR's NOTE: Many ideas expressed in this chapter have been previously published in J. M. Morse and L. Niehaus, *Mixed method design: Principles and procedures*, Walnut Creek, CA: Left Coast Press, 2009. I thank Dr. Linda Niehaus and the pre- and postdoctoral students in the EQUIPP project (Enhancing Qualitative Understanding for Illness Processes and Prevention) at the International Institute for Qualitative Methodology, University of Alberta, Canada, for their insightful questions and enthusiasm for mixed methods design.

During the last 10 years, interest in mixed method design has escalated. Researchers consider mixed method design to be a way to work efficiently with the nuances of present-day research and to encapsulate quantitative variables with phenomena that cannot easily be quantified in the same project. They consider mixed method design to be efficient because it can incorporate both meaning and quantity into the same project; it is a method that acknowledges the progression of research as it moves inductively toward solving a puzzle or increases the scope of deductive inquiry, and it is a method that enables questions that normally would emerge at the end of a project to be addressed before closure. Researchers, granting agencies, and academics realize that, in mixed method design, the two paradigms, qualitative and quantitative—designs that have been quarreling for decades—may find a peaceful and mutually respectful region in which to coexist. There has been only one problem—researchers were uncertain about how to actually *do* mixed method research (see Bryman, 2006). In this chapter, I will present one way to approach the complexities of these designs.

Clarifying What Mixed Method Design Is and Is Not

Some researchers consider mixed methods to be any project that involves both qualitative and quantitative methods (see Leech, 2010 [this volume]). The definition used here is not restricted to combinations of qualitative and quantitative projects—it also includes any research with different types of data, approaches to analysis, or research conducted on two different populations or groups, whether it be qualitative or quantitative. Mixed method design consists of one project, known as the *core* project, which is a complete method in itself, and a second project consisting of a different type of data or analysis, using a strategy (and there may be more than one) that is incomplete: that is, that is not comprehensible or publishable apart from the core project. This *supplemental strategy* provides a means to access another area that is pertinent to the research question and that cannot be included in the core component. Data for the supplemental component are collected and analyzed only until the researcher is *certain* that he or she has the answer to that particular part of the research question.

Note that the above definition of mixed method design differentiates mixed methods from multiple methods. *Multiple methods design* consists of two or more studies using different methods, which address the same research question or different parts of the same research question or programmatic goal. As each research project in a multiple method design is self-contained, complete, and publishable as a stand-alone article, there are no extraordinary methodological conundrums for researchers who are conducting a multiple method design. Often, a researcher conducts the projects and publishes them separately and then publishes a synthesizing article showing the complementary relationship between, or the complementary relationships in, the sets of findings in answering the overall question.

Once we consider mixed methods using the definition proposed by Morse and Niehaus (2009), the methodological difficulties of conducting research that consists of one complete plus one incomplete project become apparent. How does one do good science when the second component (or project)—an integral part of the project as a whole—is not complete? How does one maintain rigor when the qualitative supplemental strategy has an inadequate sample, or when the quantitative supplemental strategy (which was conducted on the qualitative sample) has an inadequate *n* and was chosen without randomization?

The Significance of the Research Question

Initially, research design is directed by and extends from the research question. If the research question is asking about, for instance, relationships, co-occurrences, or even causation, then the research project is deductive and the theoretical drive is quantitative (indicted by uppercase letters, as QUAN). That is, the complete method is a quantitative method that best answers most of the research question. The part of the question that cannot be answered by the selected quantitative question is addressed by either a qualitative or quantitative strategy, conducted either at the same time (called *simultaneous*, shown with a + sign), or else immediately following the core component (called *sequential*, indicated with an arrow →). If the research question is inductive, and descriptive or interpretative, it is usually answered using a qualitative method (indicated as QUAL), and the strategy used to answer the other part of the question may be either qualitative or quantitative and conducted simultaneously or sequentially. Thus, we have eight types of research designs (see [Table 14.1](#)) with uppercase letters indicating the theoretical drive and lowercase indicating the supplemental strategy.

Table 14.1 Major Types of Simultaneous and Sequential Mixed Method Designs	
Different Paradigms	Same Paradigms
QUAL + quan	QUAL + qual
QUAL → quan	QUAL → qual
QUAN + qual	QUAN + quan
QUAN → qual	QUAN → quan

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The theoretical drive is exceedingly important, for it reminds the researcher of the overall *direction* of the research project, even if the design includes a strategy from the other paradigm (for instance, in QUAL + *quan* or QUAN + *qual* design). However, this does not mean that the supplementary project is actually conducted using the principles of the core component of the other paradigm—it means that the results of the supplementary component will be integrated into the results of the core component, with the core component forming the theoretical base for the presentation of the results. This will be described more fully later.

In this chapter, I will address three important aspects of mixed method design: How to *maintain control* of your project so that it is not overwhelming, how to *maintain rigor* so that methodological assumptions are not violated, and how to *maintain complexity* so that your end product has not oversimplified the research problem. I will do this using the techniques of mixed method design developed with Niehaus and others (Morse, 2003; Morse & Niehaus, 2007, 2009; Morse, Niehaus, Wolfe, & Wilkins, 2006; Morse, Wolfe, & Niehaus, 2006).

Maintaining Control

The researcher must always remain in the driver's seat, even with the most complex problems. As soon as the project is conceived and the question written, we suggest that an armchair walkthrough (Mayan, 2009; Morse, 1994, 1999) be conducted. This is a technique that enables the researcher to envision how the project may be implemented by comparing the effectiveness of several methods to address the question. The researcher contemplates:

If I use this method, I could conduct the study here or there, with these subjects or participants, collecting data using x and y, and analysis doing thus and so. These results will look like this. The supplementary component could use these participants or subjects, with data pertaining to this and that, and analysis will be conducted using whatever. This supplementary component will fit into the results point of interface and should be able to provide a

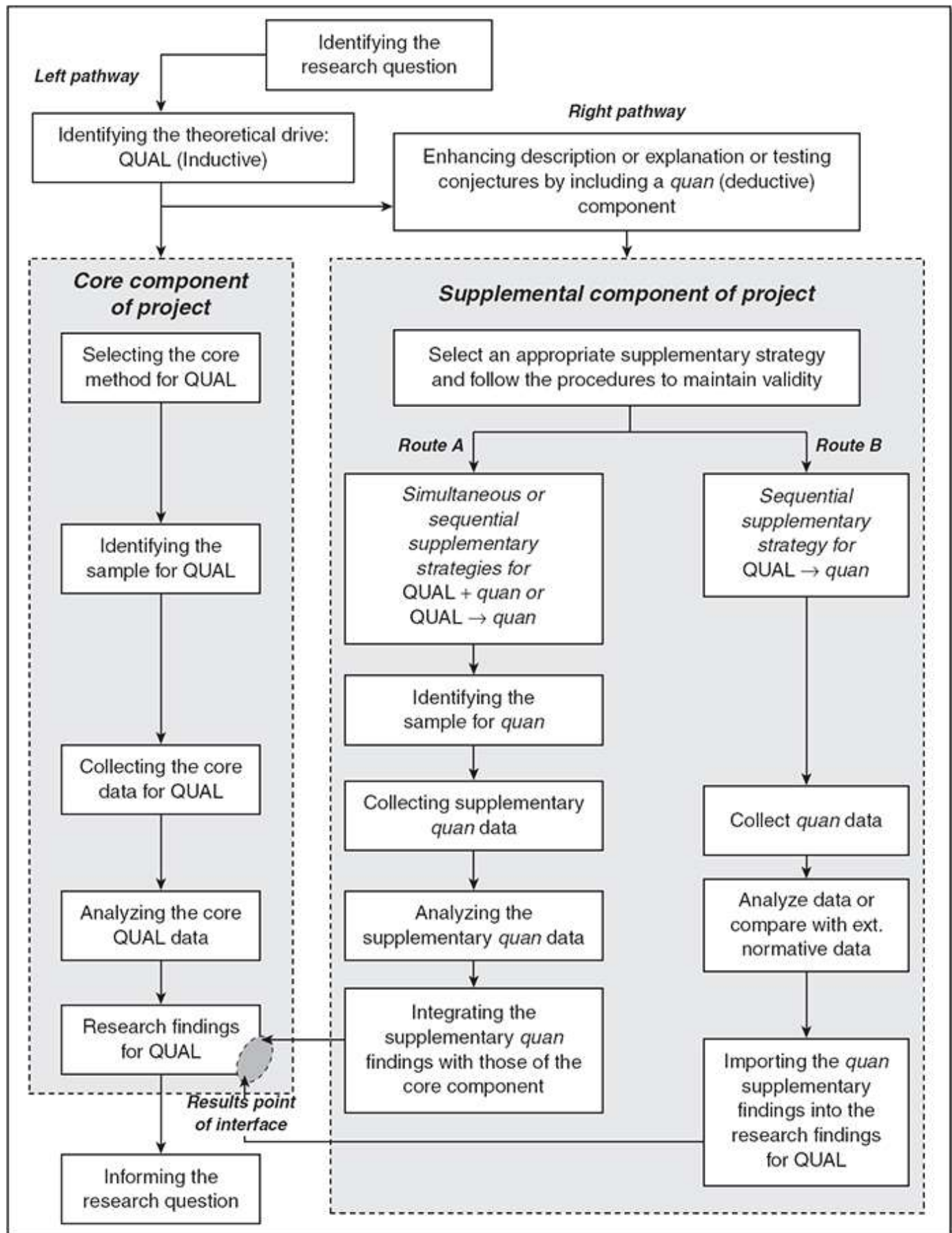
Doing an armchair walkthrough enables the researcher to envision, before investing in the project, the best core method and supplementary component and, most important, how the components fit together. The next step is to *diagram* your design.

Diagramming

Diagramming enables the research team to envision the core method, the supplemental component, and the *pacing* of the project (that is, how the two projects will be organized, i.e., simultaneously or sequentially); and to determine the *point of interface* (i.e., where they will link: either in the analysis section or the results section).

A diagram of a QUAL + *quan* project is shown in [Figure 14.1](#) and a QUAN + *qual* project in [Figure 14.2](#). Always read these flow charts from the top down, whether or not they have an inductive or deductive theoretical drive. Although they may look complicated, these are not complex diagrams, once you start going through them bit by bit. The boxes represent basic steps in the research project, and arrows lead from one step to the next. The most complex diagrams may have several research methods in one figure.

Figure 14.1 An Overview of QUAL-*quan* Mixed Method Designs


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Once you have developed your diagram, place your project details on it—include the sample size, the instruments to be used, and so forth—so that the diagram becomes a map depicting the course of the project.

Qualitatively driven designs: In [Figure 14.1](#), qualitatively driven designs show the core component (QUAL) on the left pathway. By following this down, you will see that it does not differ from the procedures for any qualitative project until one reaches the *results point of interface*. By this time, the researcher will have completed the qualitative analysis. If the project is simultaneous, a QUAL (+) design, the supplemental *qual* or *quan* project (right pathway) will have been conducted alongside of the core project. If planned well, the findings from the supplemental project would then be integrated into the *results narrative*, and following the *discussion* section, the project is completed.

If the QUAL project is conducted sequentially, the QUAL core component is conducted in the normal way until the results are analyzed. At this time, the researcher may realize that another question arising from that analysis must be addressed, and he or she will design the supplemental component. The QUAL results are then put on hold until the supplemental component is completed. At that time, the results of both components are brought together at the point of interface, and the results of the supplemental component written into the results narrative of the core component.

Examples of Qualitatively Driven Designs

Example 1. QUAL → QUAN

Habashi, J., & Worley, J. (2009). Child geopolitical agency: A mixed methods case study. *Journal of Mixed Methods Research*, 3(1), 42–64.

Design Theoretical drive: Inductive

Pacing: Sequential

QUAL component: Focus groups and interviews

quan component: Instrument

Point of interface: Results narrative

In the QUAL component of this study, focus groups and interviews were conducted with Palestinian children to explore their political socialization. From these data, a quantitative instrument was developed. This instrument was submitted to children 9 to 14 years old at 30 schools.

Example 2. QUAL + QUAN

Wittink, M. N., Barg, F. K., & Gallo, J. J. (2006). Unwritten rules of talking to doctors about depression: Integrating qualitative and quantitative methods. *Annals of Family Medicine*, 4(4), 302–309.

Design Theoretical drive: Inductive

Pacing: Simultaneous

QUAL component: Semistructured interviews

quan component: Coding of characteristics in interview and hypothesis testing

Point of interface: Results narrative

The purpose of this study was to determine patients' and physicians' perspectives on depression by assessing patients' views about interactions with their physicians. Four themes were identified from the interviews. Statistical analysis confirmed that two of the groups ("My doctor will just pick it up" and "They'll just send you to a psychiatrist") were rated

as depressed by the physician. This technique allowed for both hypothesis generation and hypothesis testing.

Quantitatively driven designs (QUAN): Again, the core component (this time a quantitative component) is shown in the left-hand pathway ([Figure 14.2](#)). Tracing this down, for simultaneous (+) projects, again the steps in the core project appear as a normal quantitative project until one reaches the analysis and the results. Here you will notice that there are two *points of interface*. The *point of interface* is the position in which the two components meet. The first position, the *analytic point of interface*, is in the analysis section of the core component. It is for importing data that has been transformed from textual (in the *qual* component) to numerical; they are imported into the *analytic point of interface* as new variables and statistically analyzed as a part of the core data. The second position is the *results point of interface*. The textual results of the *qual* supplemental component are written into the QUAN results, with the QUAN results forming the framework, or base, of the results. With sequential (→) QUAN design, again the core project is placed on hold following analysis until the data from the *qual* or *quan* supplement component have developed to the point that they may be imported into the analysis in the results narrative.

If the *qual* data are to be transformed from textual to numerical in QUAN designs, these data *must* be in a special form. The textual data in the *qual* component must have an equivalent *n* to the core QUAN component. Furthermore, all participants in the *qual* sample *must have been asked the same question(s), in the same order*. These data are usually in the form of semistructured interviews, or from semistructured questions that are embedded, for instance, into the quantitative questionnaire (if used in the QUAN component).¹ New variables are then made to accommodate the imported transformed data, and these are statistically analyzed with the quantitative data set.

Examples of Quantitatively Driven Designs

Example 3. QUAN + QUAL

Brady, B., & O'Regan, C. O. (2009). Meeting the challenge of doing RCT evaluations of youth mentoring in Ireland: A journey of mixed methods. *Journal of Mixed Methods Research*, 3(3), 265–280.

Design Theoretical drive: Deductive

Pacing: Simultaneous

QUAN component: Pre, during, and past survey

qual component: Observation, file analysis, case study interviews, and staff focus groups

Point of interface: Results

In this project, the program *Big Brothers Big Sisters* was evaluated using a QUAN + qual design. The quantitative portion was a series of surveys of youths, parents, mentors, and teachers to determine satisfaction data. The qual component consisted of a number of strategies—observations, file analysis case studies, interviews, and focus groups—to develop themes for the evaluation processes during the study.

Example 4. QUAN→ QUAL

Hinton, D. E., Nguyen, L., & Pollack, M. H. (2007). Orthostatic panic events as a key Vietnamese reaction to traumatic events: The case of September 11, 2001. *Medical Anthropological Quarterly*, 21(1), 81–107.

Design Theoretical drive: Deductive

Pacing: Sequential

QUAN component: 4 instruments

qual component: Interviews

Point of interface: Results narrative

This quantitatively driven, sequential mixed method design examines trauma-related disorder in the cross-cultural perspective, including the model of orthostatic panic attacks (pp. 81–92) in Vietnamese immigrants. Participants were administered four structured interviews/scales measuring the (1) orthostatic panic symptoms and, if present, (2) their severity, (3) their incidence in the past month, and (4) the degree of dissociation experienced

prior to September 11, 2001, and one month after, and the scores for the two data points were compared. The sequential qualitative component consisted of interviews with 10 patients. Each patient was shown the orthostatic panic model, given an explanation of the condition's causation, and asked if "that explanation matched his or her understanding" (p. 93). The point of interface of the two components is in the results section, with the results of each component presented in separate sections.

Single-Paradigm Mixed Method Designs

Mixed method designs are not solely "cross paradigm" designs but may also include QUAL $\rightarrow$ *qual* and QUAN $\rightarrow$ *quan* designs when the phenomenon demands it. Both QUAL $\rightarrow$ *qual* and QUAN $\rightarrow$ *quan* are used either when different types of data are used or when different levels of data (e.g., micro and macro) are used in the same project. The trickiest, however, is QUAL $\rightarrow$ *qual*.

*QUAL $\rightarrow$ *qual* designs:* Given that qualitative designs frequently contain more than one strategy (for instance, ethnography), is there such a design as QUAL $\rightarrow$ *qual*? Ethnography has always consisted of several different strategies, and that is what enables ethnography to "get below the surface." The QUAL component may consist of any standard qualitative method (e.g., focus groups, grounded theory, ethnography, phenomenology or participant observation), and the supplemental component may be interviews or observations from another person (e.g., caregivers' perspectives added to patients') added to obtain a different point of view from another group (e.g., another ethnic group) or from a different level for analysis (for instance, using conversational analysis or qualitative ethology). Sequential supplemental components may be for evaluation research, for instance, qualitatively derived assessment or qualitative outcome analysis (Morse & Penrod, 2000).

*QUAN $\rightarrow$ *quan* designs:* An example of QUAN + *quan* may be a survey or some type of questionnaire as the QUAN component and the supplemental component *quan*, a physiological measure. An example of QUAN $\rightarrow$ *quan* may be a study that is separated by time or, for instance, an evaluation project. If the sample sizes are the same, the point of interface may be the *analytic point of interface* (in the analysis of the core component); if

Respect the Theoretical Drive

Why is the *theoretical drive* important? The theoretical drive reminds the researcher of the overall direction of the project. It assists the researcher to remain consistent with the principles of induction and qualitative inquiry (for QUAL projects) or with deduction and quantitative inquiry (for QUAN projects). This is particularly important with sampling.

Sampling for supplementary components: The greatest threat to validity in QUAL $+/\rightarrow$ quan or QUAN $+/\rightarrow$ qual designs is in sampling for the supplementary component. In both cases, the sample used in the core component is unsuitable—and invalid—if used in the supplementary component. Yet, despite the fact that the theoretical drive is inductive (for QUAL projects) and deductive (for QUAN projects), the supplementary component must be conducted by adhering to the principles of the supplementary component's paradigm. Details will be discussed in the “Maintaining Rigor” section.

Maintain Parsimony

Can you have more than one supplemental component? You can, but remember, every time you introduce another supplemental component, you are introducing more work. Your study will become more complicated, until your mind is spinning with data sets. Every time you add a supplemental component, you risk threats to validity and add costs and delays to your project. A good rule is that an answer to a question must be crucial to the project and urgently needed before you decide to add another component.

Recognize When You Are Finished

This sounds absurd, but knowing when to stop is not that easy. Because the supplemental component is not a complete method, the usual indicators of a project being finished are not available (i.e., for a *qual* component, indices of saturation, or for a *quan* component, perhaps statistical significance). The measure we use is that of researcher *certainty*: If the qualitative data provides the researcher with the confidence to understand whatever it is he or she is

confidence to know when his or her questions have been answered, to be certain that it is probably correct, and to stop. In quantitative research, the researcher may use an instrument or scale with the qualitative sample—a purposeful, small sample. Using the sample is fine *provided* that the researcher has external norms or the physiological measures, or whatever, with which to interpret the scores. If the researcher does not have external norms and the qualitative sample is too small or unavailable, then he or she will have to draw another sample randomly from the population or use nonparametric statistics. The sample will be just large enough to provide a mean value, but not large enough to be considered completely “representative of the population.”

Of course, the study is not completed at that point. The findings for the supplemental component must then be imported at the point of interface into the results narrative of the core component, and the study results and discussion sections written.

Maintaining Rigor

Keep the Qual-Qual Components Qualitative, and the Quan-quant Components Quantitative

Regardless of the direction of the theoretical drive, the assumptions of each method must be respected. If the supplemental component is *qual*, then you must adhere to qualitative principles when conducting the supplemental component. Conversely, when the supplemental component is *quan*, adhere to quantitative principles. The researcher must keep each component separate until the point of interface—whether it is conducted in the same direction or against the theoretical drive. Mixed methods are not data soup!

Attend to the Principles of Sampling

It invalidates the QUAL $\rightarrow$ *quan* project to use the QUAL sample for the quantitative component—the QUAL sample is inadequate: It is too small, and it has been purposively selected, so that from a quantitative perspective, it is biased. Similarly, it invalidates the QUAN $\rightarrow$ *qual* project to use the QUAN sample—the sample is too large and it has been

QUAL +/→ quan designs: When sampling for the *quan* supplemental component in QUAL +/→ *quan* designs, the researcher is usually forced to draw a new sample from the population, one that is randomly selected and of the necessary size for analyzing the *quan* data. One exception: If the researcher has a quantitative instrument with external norms, and if the design is simultaneous, the researcher may give the instrument to the QUAL sample and use the normative data to interpret the participants' scores.

QUAN +/→ qual designs: When sampling for the *qual* supplemental component in QUAN +/→ *qual* designs, the researcher must be true to the principles of qualitative sampling. Some researchers draw the qualitative sample from the quantitative, using participants' scores as the basis for selection, or better, ask the research assistants who are collecting the data for the QUAN component to nominate the *qual* sample using qualitative criteria (i.e., select participants who are articulate, knowledgeable about the topic, and willing to participate). If the study is a sequential design, or if the task of drawing a sample from the QUAN sample is too awkward, a new qualitative sample should be selected from the population.

Points of Interface

One of the key aspects of mixed methods design is that although the two components are conducted separately, the supplemental component is imported into the core component for analysis (at the analytic point of interface) or into the results section to contribute to the narrative description of the results.

The analytic point of interface: As mentioned, there are only two research designs that are analyzed with the core data, and then only in special circumstances. The first is QUAN + *qual*, in which the qualitative data may be transformed to numerical data and these variables analyzed in the core statistical data set. Again, this may be performed only if in the *qual* component, the sample size is equivalent and the necessary data are available from all participants.

The second is QUAL + *quan* when everyone in the qualitative interviews has been asked a key question, one that can sort the entire set of interviews into groups, and then a chi-

For instance, in a study of health in the inner city, participants' definitions of health could be coded as either physical or psychological, and when compared with the participants' self-rating of health, there was a significant relationship between how the residents defined health and rated their own health (Morse, 1987).

The results point of interface: All research has a section in which the results are presented for the reader. This is primarily narrative, although it may contain some tables or figures to enhance the description.

So it is with mixed method research. Ideally, the researcher writes the results section, combining the findings from both components, although not paragraph by paragraph. The core component always forms the theoretical base or foundation for the results, and the findings from the supplemental core embellish this, adding important detail. While the reader should be able to identify which results came from each component, on no account should the two results be presented separately.

Be Reflexive (Use Incremental Validity)

The key to validity in qualitative inquiry is reflexivity (Finlay, 2002). This is because you are learning as you go along and cannot entirely anticipate what you will find, even given the benefits of an armchair walkthrough. A single method study may, when nearing completion, become a mixed method study. A question may arise in the analysis that may appear relatively easy to answer, but in order to answer, it may be necessary to collect some data. In this case, you have a “designing on the run” sequential mixed method project. Of course, the additional method requires that you get approvals from your granting agency and from the institutional review board; even so, it is more efficient than publishing the first phase—and having the reviewers ask the obvious question—or conducting another study. Adding a sequential component (designing on the run) allows you to answer the questions that have emerged and places you in a better position to be funded for a subsequent study.

Mistakes and Other Threats to Validity

The supplemental component precedes the core: Why can you *not* have designs in which the supplementary component precedes the core component? Well, everything is do-able, but it is not a good idea. Suppose you were conducting a project that you describe as *qual* → QUAN. The *qual* supplemental component may consist of “a few focus groups” from which you will develop a Likert scale, and because the Likert scale study appears to be the most work, you call it the core component. Now the hypothesized scale factors and the item wording will be obtained from the focus group data. Are you willing to skimp on a component that is so important to the success of your research program? This should NOT be *qual* → QUAN, but QUAL → *quan*, for the theoretical structure of the research program is resting on the qualitative component. Using “a few focus groups” is a threat to validity; as this component is so important to other research programs, it should be completed properly. As the second project will also be complete in itself, this will not be a mixed method project, but a multiple-method project. Subsequent complete projects are thus indicated by using small caps. The theoretical drive remains qualitative for the research program, because our programmatic question pertained to theory development.

A second common misconception for preceding the core project with the supplements is labeling the pilot project as a supplemental project. The purpose of a pilot project is to pretest an instrument, to see if one can get a sample for the main project, to learn how to use equipment or how to interview, and so forth. These purposes are steps in the process of preparing to do research, rather than steps that contribute to the theoretical progression of the project.

Using the supplemental component as the framework in the results: If you try this, you will immediately get into trouble because even in a QUAN +/→ *qual* design and the results point of interface, the qualitative findings are not rich enough to develop a theoretical base in which to place the findings. You *must* use the theoretical framework developed for the quantitative component at the beginning of the study. For QUAL +/→ *quan*, the quantitative measures are not cohesive and again cannot be used as the theoretical foundation into which you can write the results.

Writing up each component in separate paragraphs: This is not a serious problem, only a

paragraphs makes it difficult to show the complementary and integrated nature of the two components. Given that you have gone to all of that work to demonstrate that these two components are a part of the same phenomenon, you should then respect your own perspective!

Maintaining Complexity

The advantage of mixed method designs is that they allow the researcher to maintain the complexity of the phenomena within the research project. The splicing of reality to convert phenomena into researchable chunks is minimized. In QUAL designs, an accurate description of the interpretative prerogative is maintained. In QUAN designs, the representation or linking that measurement offers is retained. Mixed method designs can be as complex as the phenomena demand: There is no need to limit the number of supplementary projects to one. For example, in a QUAL project, you may have a simultaneous *quan* component and a sequential *qual* component. The notation for that project would be $QUAL + quan \rightarrow qual$. Similarly with a QUAN project, you may have a simultaneous *qual* supplementary component and a sequential *quan* supplementary component: $QUAN + qual \rightarrow quan$.

Adding to Multiple Method Projects

Mixed method projects may also be combined with single-method projects in a multiple methods design. If a complete single project is added to the chain of projects, it is presented in small caps as it is still under the rubric of the *theoretical thrust* of the project. *Theoretical thrust* is the equivalent of the theoretical drive, except it refers to the research program or multiple method project. The first project planned from the research goal provides direction for the entire research program. For instance,



is a QUAN + *qual* mixed method project, followed by a quantitative project, followed by another quantitative project. A project



is a mixed method qualitatively driven project with a sequential quantitative component. At the same time a qualitative mixed method project with a qualitative supplemental component is conducted, with a sequential quantitative supplemental component.

Conclusions

In summary, when preparing a mixed method proposal, it is important to maintain control. Always do an armchair walkthrough to ensure that you have considered all optional designs

your study, and place as much information as possible on the diagram to make a map of your project.

When presenting or critiquing designs, or writing up your study, list details of the design, including

- Theoretical drive: Inductive or deductive
- Core component: QUAL or QUAN
 - Method: (identify/describe)
- Supplemental component(s): *qual* or *quan*
 - Strategy(ies): (identify/describe)
- Pacing: Simultaneous or sequential
- Point of interface: Analytic or results narrative

Delineating your mixed method design this way will enable the project to be conducted with minimal error and confusion, and writing will enable clear communication of what you did, when, why, and how, enabling the evaluation—and appreciation—of the results.

Research Questions and Exercises

1. Are there disadvantages in doing mixed method design? Identify studies in which multiple method design would be advantageous.
2. Are there disadvantages in doing multiple method design? Identify studies in which mixed method design would be advantageous.
3. Has mixed method design replaced triangulation? Can you use mixed method design to triangulate for validity?
4. What are the *dangers* of oversimplifying research design?
5. Why are semistructured interviews the most common qualitative method used in quantitatively driven mixed method design?
6. What are the risks of “maintaining complexity” in research design?
7. Pull some articles from the literature that have used mixed method design. Practice identifying the theoretical drive of these studies and diagramming their designs.

Note

1. It is no surprise that Bryman (2006) found that semistructured interviews were the most common qualitative method when combined with quantitative. The reason is that this

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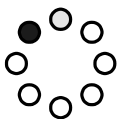
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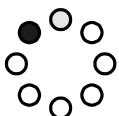
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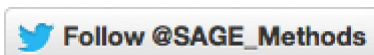
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