

An Introduction to Qualitative Research Synthesis

Managing the information
explosion in social science
research

**Claire Howell Major and
Maggi Savin-Baden**

An Introduction to Qualitative Research Synthesis

Providing a comprehensive guide for understanding, interpreting and synthesizing qualitative studies, *An Introduction to Qualitative Research Synthesis* shows how data can be collated together effectively to summarize existing bodies of knowledge and to create a more complete picture of findings across different studies.

The authors describe qualitative research synthesis and argue for its use, describing the process of data analysis, synthesis and interpretation, and provide specific details and examples of how the approach works in practice.

This accessible book:

- fully explains the qualitative research synthesis approach;
- provides advice and examples of findings;
- describes the process of establishing credibility in the research process;
- provides annotated examples of the work in process;
- references published examples of the approach across a range of fields.

Helping researchers to understand, make meaning and synthesize a wide variety of datasets, this book is broad in scope yet practical in approach. It will be beneficial to those working in social science disciplines, including researchers, teachers, students and policymakers. This book will be useful to researchers with interests in meta-ethnography, meta-synthesis, critical interpretive synthesis and qualitative synthesis.

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Introduction

Claire Howell Major and Maggi Savin-Baden

We began our collaboration nearly a decade ago when we began work guest-editing a special issue of the *Journal on Excellence in College Teaching* that focused on problem-based learning. The editor had asked us to co-edit the issue as she thought we shared some common research interests. We soon realized that even though we were working in different countries, we were researching similar topics, drawing upon similar methods and participant pools, and arriving at results and conclusions that overlapped in many ways.

Maggi was working with a group of lecturers in several universities across the UK to research their experiences with problem-based learning. She relied upon narrative inquiry and semi-structured interview techniques and discovered findings related to how adopting a problem-based approach led to disjunctions that caused staff to change their teaching stances. Claire was conducting research at a single institution in the US for an ongoing study relying on narrative inquiry and semi-structured interviews. Her work led to findings about how transition to a problem-based approach changed staff knowledge of teaching and their disciplines and ultimately led to changes in teaching practices.

Comparing our work led us to many interesting conversations about the nature of knowledge and research. Over time our discussions turned to questions of how we could learn more from what we had both been doing by viewing it collectively, not only to inform our own next research steps but also to inform others about our comprehensive findings. We decided to work together to seek to uncover the knowledge that our studies, and others like them, jointly had to offer the field of problem-based learning. The question we faced was how to undertake such a task.

From the outset we acknowledged that the social science researcher's quest to extract knowledge from existing studies and their findings was nothing new. Indeed, the literature summary or literature review has long been a staple of social science research. These kinds of reviews tend to summarize, or sometimes synthesize, the arguments and ideas of others, often to argue for a new study. We knew that we could undertake such a summary or review before undertaking a new study collaboratively, but were interested in something different: a way to make meaning from existing qualitative studies viewed in aggregate. In some

ways, we were seeking a parallel for qualitative research that meta-analysis has provided quantitative researchers.

Our search for a model led us initially to narrative reviews of literature, which have appeared over the past couple of decades under a variety of names, including narrative review, narrative explanatory synthesis, research synthesis, explanatory literature review and narrative literature review (see for example Cooper, 1998; Cooper and Hedges, 1994; Light and Pillemer, 1982; Pascarella and Terenzini, 1991, 2005). Those who used these approaches most often reviewed primarily quantitative literature or did not document the kind of methodological rigour we were seeking. In contrast, we wanted a way to situate and view our studies and other qualitative studies on the same topic in relation to each other, and to discover the greater meaning implicit within the collection. Thus began our journey into learning about and using approaches to synthesizing qualitative studies.

During our investigation of various approaches to this task, we found some useful models, including qualitative meta-analysis, in which findings of qualitative studies are synthesized into a theoretical model (see for example, Bland *et al.*, 1995; Crismore, 1985; DeWitt-Brinks and Rhodes, 1992; Hager and Hasselhorn, 1998; Schreiber *et al.*, 1989). We also found meta-summary (see for example Sandelowski *et al.*, 2007) as well as grounded meta-analysis (Hossler and Scalese-Love, 1989), in which findings are aggregated through topical or thematic summaries by means of extraction and reduction of data. There were also other approaches to synthesizing qualitative evidence, such as quantitative content analysis and case survey, which tend to impose quantitative processes on qualitative data.

We found some useful approaches relying upon qualitative methods to synthesize qualitative research. Among these were the efforts in health care by the Evidence for Policy and Practice Information Centre (EPPI) in the Social Science Research Unit at the Institute of Education, University of London and the JoAnna Briggs Institute in South Australia. These provided helpful guides, but tended to be more narrative-based or aggregative than interpretive in stance; indeed, which stance is the most appropriate is a key debate in literature about synthesis of qualitative research. We learned much from this body of work as well as from some of the previously published work about synthesizing qualitative research. Perhaps most influential on our thinking was Noblit and Hare's classic text, *Meta-ethnography* (1988). We shared with these authors a belief in the importance of approaching qualitative synthesis from an interpretive stance. Trends in the nature of qualitative research during the last two decades, though, shaped our views of what processes should entail.

Ultimately we decided to devise a process for qualitative research synthesis ourselves, one that built upon the important work of others and that relied upon a critical interpretive stance that fitted our philosophical perspective. Our quest for a process ultimately bore fruit, and after presenting an early version of our work in 2003, we published our first article using the approach in 2007. In this piece we interpreted the findings of six studies about staff experiences

of problem-based learning. Our original submission had caused controversy between reviewers, which required not only significant justification of our methods but also inclusion of more articles than we initially intended. Maggi later had a similar experience while working on a book chapter (Savin-Baden and Wilkie, 2004), which required justification of her selection of methods; she then completed three further studies (Sharpe and Savin-Baden, 2007; Savin-Baden *et al.*, 2007, 2008) and began conducting workshops helping other researchers learn the approach. Claire also later wrote another article using the approach (2010), with which the reviewers required extensive information about the inclusion of a small number of studies as well as about how she avoided researcher bias. She later began using the approach as an assignment in her doctoral level seminars.

After our experiences, collaborative as well as individual, we both remain committed to the approach of qualitative research synthesis for a number of reasons that we describe more fully throughout this book, particularly in Chapter 1. Among other things qualitative research synthesis:

- provides a way to deal with information explosion;
- helps researchers avoid reinventing the wheel;
- makes connections between existing studies;
- complements primary empirical studies;
- complements existing quantitative meta-analysis or -syntheses by providing a different perspective on a given phenomenon;
- provides ways to advance theory;
- helps to identify gaps and omissions in a given body of research;
- enables dialogue and debate;
- allows for development of evidence-based practice and policy;
- provides a cost-efficient approach to qualitative research.

In discussing the importance of this methodology, as well as in considering how to move the approach forward, we noted how useful we would have found it to have had a practical guide, with details and examples, of how a qualitative research synthesis could be implemented. When we first began, few guides existed. Although some useful guides have been published since (see for example Sandelowski and Barroso, 2007), we believe that by explaining our approach, we can contribute to the conversation and thus ultimately help advance the methodology. For this reason, we determined to write this book together to outline the essential elements of the process that we feel to be critical to the approach as well as to provide examples of the approach in practice.

The purpose of this book, then, is to provide a user-friendly guide to qualitative research synthesis. The intended audience for the book is broad and comprises several groups. We believe that the book will be useful to social science researchers, particularly those who are new to the approach. It provides an adaptable model for using the methodology as well as specific examples of various ways to approach it that can help novice synthesists understand and undertake the approach.

Further, for experienced synthesists, this book provides a different perspective that may be useful in considering ways to develop and refine approaches. The book also is intended to be useful to lecturers, who may wish to assign a qualitative research synthesis in lieu of a traditional research paper or research review. An assignment such as a qualitative research synthesis has numerous pedagogical advantages, including requiring students to become more critical of an existing body of research and to use higher-order thinking skills when reviewing and synthesizing literature. Indeed, lecturers may find this book to be a useful textbook and students may find it a useful supplement to research sourcebooks, as it can help guide students through the process of qualitative research synthesis. Finally, practitioners and policy makers should find this book of use. It can help them better understand the processes behind the research synthesis reports they are reading as they strive to develop evidence-based practices and policies. In short, policy makers can be better consumers of information if they have more knowledge of the processes involved in creating such research reports.

This book comprises three parts. Part 1 is our effort to provide readers with information about qualitative research synthesis so that they have the language and tools to describe and argue for the approach as well as to refute arguments against it. We provide information about the benefits and challenges of the approach in Chapter 1. In Chapter 2, we locate qualitative research synthesis within a growing tradition of review and synthesis, including those approaches we mentioned above such as qualitative meta-analysis and case synthesis. We compare its essential features and elements with other approaches.

Part 2 of this book describes the whole process of a qualitative research synthesis. In Chapter 3, we outline the process of defining the search parameters, beginning with identifying a research question suitable for a qualitative research synthesis. In this chapter, we also present approaches to searching, including electronic and hand searching. Finally, we identify ways in which studies may be evaluated for inclusion or exclusion based on quality as well as upon fit, when measured against a predetermined set of criteria. The processes of data analysis, synthesis and interpretation in qualitative research synthesis in some ways mirror those used in primary qualitative research. Several key differences exist, however, so in Chapter 4, we describe our three-part process for analysing, synthesizing and interpreting data. We provide sample templates as well as examples of how the process has been implemented.

Issues of transparency exist with any qualitative research, and in Chapter 5 we acknowledge the difficulties that are unique to qualitative research synthesis. In this chapter, we provide readers with ways of thinking about issues of plausibility, as well as specific techniques for ensuring research honesties. We outline a process that users may adapt to their own ends to ensure plausibility. In Chapter 6 we describe ways in which findings from a qualitative research synthesis may be presented, ways that allow for transparency of processes as well as products. From a description of narrative voice to examples of tables and diagrams, this chapter provides the reader with concrete information about the various forms that

findings might take. In our conclusion to Parts 1 and 2, we review our rationale for writing the book, while highlighting some of the key criteria of the approach we advocate.

Finally, in Part 3 of this book, we provide the reader with resources, primarily aimed at giving the reader a sampling of the approach of qualitative research synthesis. We include executive summaries of articles that we have written using our approach. We also include the full text of an article using qualitative research synthesis, the first that we wrote (reprinted with permission), which we have annotated for this book. The purpose of including this article is to provide readers with a model, of which we have come to be critical, as only authors can be when viewing their work after significant time has elapsed. Finally, we provide readers with a bibliography of information about qualitative synthesis, more broadly, as well as a bibliography of published studies that employed it. These citations are intended to provide readers with models of qualitative research synthesis or related approaches, perhaps within their own disciplines or fields.

We hope that this book serves as a useful guide for users of qualitative research synthesis. Furthermore, we hope that it encourages conversation and debate about the approach. It is through such scholarly conversations that qualitative research synthesis can be both illuminated and advanced as an approach.

Part I

Arguing for qualitative research synthesis

Making the case for qualitative research synthesis

Introduction

A number of factors have contributed to the recent drive to approach social science research differently. The morass of existing research reports, for example, has led to a kind of information overload requiring new ways of managing and making sense of them. Research, both qualitative and quantitative, is costly, and lean financial resources have made it imperative to make the most and best use of findings. A number of professional practice sectors including health care, education and social work have encountered a rise in the number and urgency of calls for accountability. Stakeholders want to know that efforts to develop new practices and programmes are effective. Calls for evidence-based practice and policy have also been on the rise, bringing current research practices into question. The underlying notion for such calls is that research should be brought closer to those who are in decision-making roles and further that research should come before an intervention or change in practice or policy (Pawson, 2002). The bottom line is that stakeholders want transparent processes, clear synthesized findings and solid recommendations for both practice and research as a result of the findings.

The convergence of such forces has sparked a debate about the purpose of social science research (see Hammersley and Foster, 1998). As a result, many have begun to view their charge differently; rather than an exercise of conducting research for research's sake, they have begun to view research as a purposeful enterprise that can help inform current professional practice. This shift in thinking has led to the drive that some feel to make the most of existing research studies, not only to manage the information and maximize the cost effectiveness, but also to show that change efforts are having an effect.

Traditional literature reviews have not been as effective at using findings as many would have hoped. Such research reviews have been criticized for a number of reasons, including their lack of precision, propensity for subjectivity and inherent biases. The task of conducting a good literature review indeed is fraught with challenges, as primary studies draw upon different methodological traditions, produce complicated findings and exist *en masse* (Cooper, 1998; Whittemore, 2005). These factors have led researchers to search for

something more: a better approach for making sense of existing research studies. Qualitative research synthesis is an approach that can help accomplish that goal.

Due to the relative newness of qualitative research synthesis, as well as the questions and criticisms that synthesists may encounter, it is appropriate and important to describe the approach as well as to make a case for it. Synthesists also may find it useful to acknowledge the method's potential pitfalls, while indicating how they have avoided them. In this chapter, we provide an overview of qualitative research synthesis. We further explore what we believe are some of the most essential arguments for the method. Finally, we identify the criticisms that we have encountered most often, providing what we believe are appropriate counterpoints.

Qualitative research synthesis

At its most fundamental level, qualitative research synthesis is an approach that uses qualitative methods to analyse, synthesize and interpret the results from qualitative studies. In practice, synthesists seek to answer a specific research question through combining qualitative studies that use thick description and that are located in broadly the same tradition, in order to make sense of themes and issues across the particular data set. Qualitative research synthesis is methodologically-grounded and rigorous. It requires bringing out the qualities of meaning at a level higher from existing qualitative studies by combining them into a new whole.

In a qualitative research synthesis, synthesists undertake several specific tasks. While we describe these in more detail in Chapter 2 as well as in Part 2 of this book, here we outline the primary processes in Figure 1.1.

The process of qualitative research synthesis, while it may be described and predicted in linear terms as in Figure 1.1, is an iterative one. The search and selection phase, for example, involves instances in which the inclusion and exclusion criteria must be refined due to the articles identified, and the review of articles must be restarted. The three primary phases of analysis include 1) summarizing findings across studies and identifying which of those findings are clear and supported; 2) comparing and aggregating these findings; and 3) interpreting findings in relation to core themes that emerge across studies. Analysis requires accounting for interpretations in the original studies, which by nature demands reflexivity. The recommendations should relate to the interpretive narrative, so writing these two sections necessitates recursive activity.

Top ten arguments for using the approach

Qualitative research synthesis is valuable simply since it determines what the results of several studies, when viewed together, reveal. It is also important for the methodological contributions it makes to social science research. There also are several

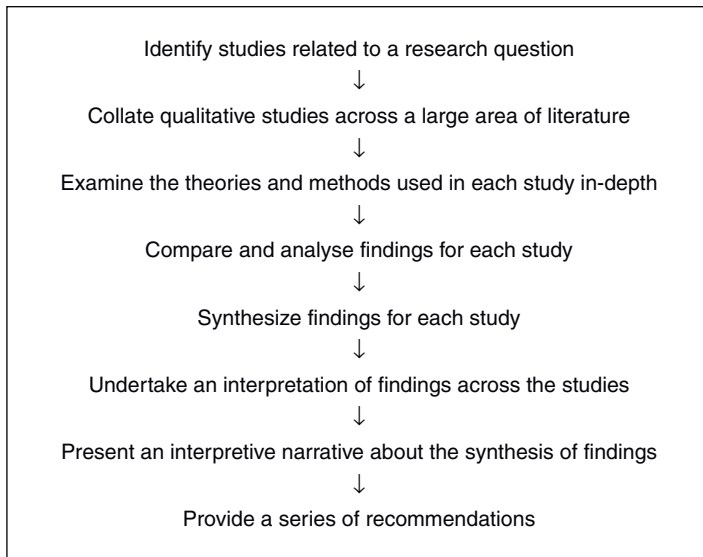


Figure 1.1 Process of qualitative research synthesis.

specific arguments for using it as a research approach that goes beyond these two general attributes. Here we outline the ten we have found to be most useful.

1. Qualitative research synthesis can help contain the information explosion

Qualitative research has enjoyed a surge in popularity during the past few decades. Thousands of qualitative studies have been published in the practice professions, including nursing, medicine, business, and education in particular. This rise in the number of qualitative research studies marks an information explosion in social science research. The challenge for users is to digest and make sense of the information relevant to them. Yet mass information such as this arguably becomes unusable for many readers, researchers, practitioners and policy makers. The result can be an information overload.

Synthesizing existing information, through approaches such as qualitative research synthesis, provides a way to combine knowledge. Through qualitative research synthesis, large amounts of information are aggregated and then interpreted. The result is a research report that presents a comprehensive view of knowledge contained in multiple studies. Qualitative research synthesis then allows researchers not only to summarize an existing body of knowledge but also to discover meaning in it. Thus, the information explosion around a given topic

is in some ways contained, and knowledge is rendered more comprehensible to others.

2. Qualitative research synthesis helps manage the information explosion

Related to the notion of containing the information explosion is the attending idea that it is important to manage this information as well. Due to the sheer number of studies and complications with searching, findings from original research often are lost in the data shuffle. Further, existing database management of research studies can be difficult to use, and frequently require the researcher to divine a mysterious combination of keywords, descriptors and identifiers to yield relevant research studies on a given topic. Differences in terminology in different countries (for example, staff versus faculty, as in the UK and US respectively) further complicate the search process. Hand-searching bibliographies of articles in relevant journals may help but still may not produce exhaustive results, since researchers often miss related studies.

Qualitative research synthesis offers one avenue for organizing the information that researchers have generated. It can yield research reports using studies clustered around a given topic. Synthesizing existing qualitative studies thus begins important steps in categorizing and systematizing information so that it is more readily searchable and usable. The methodology thus can provide an additional layer of filtering that can draw attention to studies that might otherwise remain obscured.

3. Qualitative research synthesis helps address the problem of knowledge fragmentation

The trend in the social sciences has been toward increased specialization. Within disciplines and fields, many new subfields have emerged. Within those subfields, many speciality areas have developed. The result is that researchers tend to identify with others in their own speciality areas and at times demonstrate little awareness of work similar to theirs that emerges from other areas. Primary research, then, often is done piecemeal, with little knowledge or acknowledgment of related work. Knowledge thus becomes fragmented and isolated. Even early proponents of qualitative methodology were worried that individual studies would become ‘little islands’ unto themselves, never to be linked or revisited (Glaser and Strauss, 1971: 181).

Qualitative research synthesis offers a potential solution to the problem. It is a form of qualitative research that allows for the linking of concepts across studies (Noblit and Hare, 1988). Through this approach, studies are linked based upon theories, methods and results. It requires the connecting of studies in a way that helps alleviate the issue of fragmentation of knowledge and instead seeks to build a comprehensible knowledge base. Qualitative research synthesis