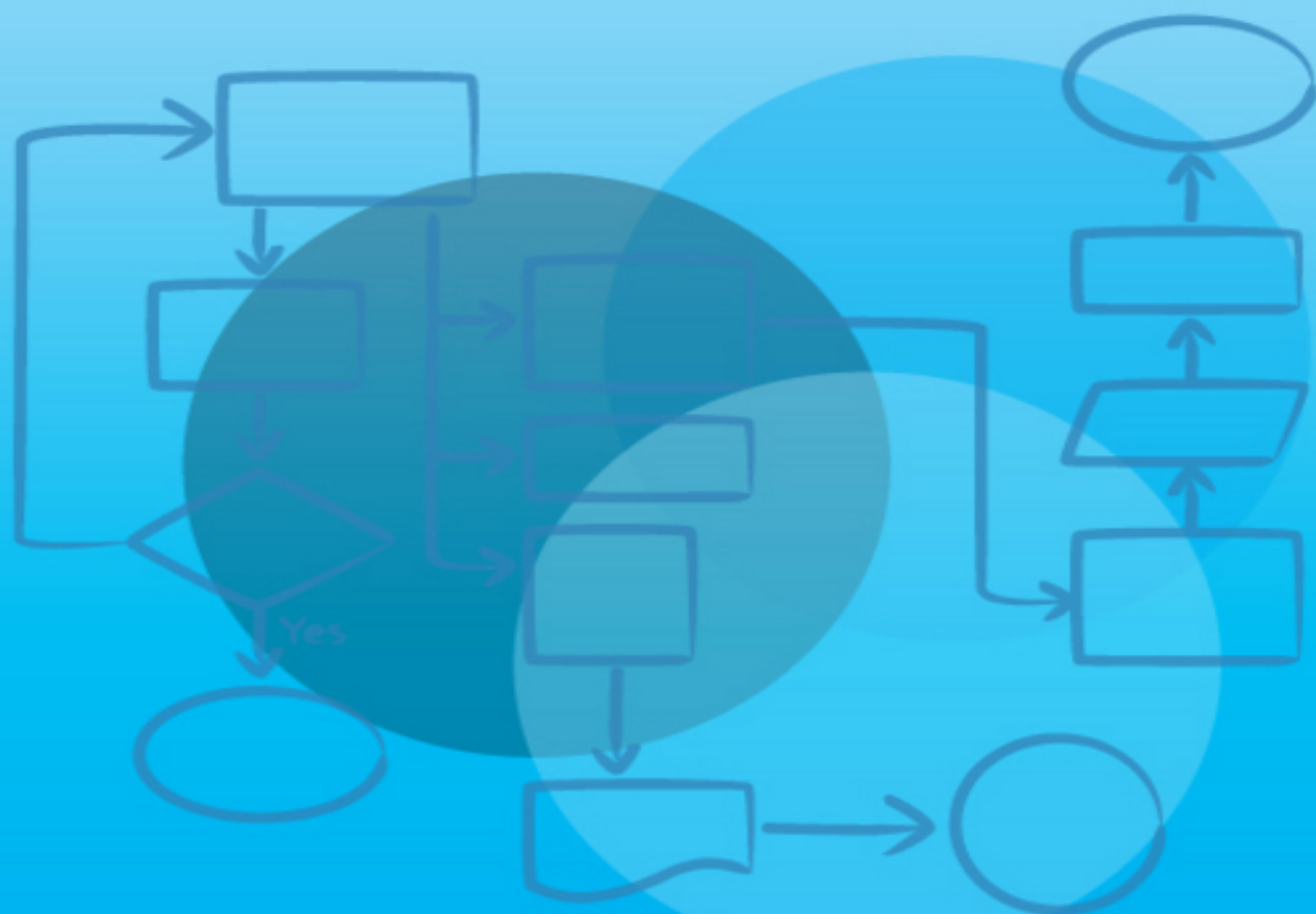


Synthesizing Qualitative Research

Choosing the
Right Approach

KARIN HANNES & CRAIG LOCKWOOD



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*This book is dedicated to the future of synthesis science;
a disparate field with rich potential for further
methodological development. We trust that this book
makes both a useful, practical contribution to what is
known here and now and enables the next generation of
students, academics, theorists, and researchers to draw
upon some of today's best synthesis scientists for
tomorrow's methodology.*

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Preface

The growth in qualitative evidence synthesis methods, and the increasing number of reviews that are published using these methods, is a clear indicator that what was once a field for the “interested few” is becoming mainstream practice. There are now large numbers of published qualitative synthesis papers, as well as a growing body of academic and theoretical work to further inform the conduct of qualitative reviews, and to further stimulate methodological development. It is within the last few years that the majority of methodological development has occurred, and within this timeframe, good theorists have enhanced and refined their methods, as is evident in the quality of published qualitative synthesis reports seen in mainstream journals to date. The majority of methodological guidance though is buried in websites or published in specialized journals. The few books available tend to have a limited focus on a particular methodology, or are theoretical rather than practical. Methodology papers in journals serve to flag issues or ideas, but limitations prevent the level of depth and explanation possible in a book. The word limit of journal articles prevents many authors from comprehensively describing their full methods, and providing appropriate illustration or exemplars is also problematic in most journals.

Writing about synthesis methods included the process of choosing between different approaches, selecting what would be appropriate for this particular book and what would be put into the drawer until a new opportunity for writing arose. Although first intended as a compendium of all qualitative evidence synthesis methods, we decided to focus this book on six commonly used methodologies for qualitative evidence synthesis. We opted to portray those synthesis approaches that have particularly been

developed by and for researchers involved in systematically reviewing literature. Our choice has been influenced by previously published overviews of approaches from colleague methodologists, personal knowledge, and connections and the conversations that occur in our respective fields internationally. We have focused on methods that have been developed with the aim of synthesizing primary studies, providing the reader with a detailed stepwise description on how to move from original research texts to a review of qualitative literature. We believe that these approaches will generate interest from the international community of researchers, practitioners and policymakers currently involved in qualitative evidence synthesis.

The book is meant to be a guide to reviewers and users from any discipline, although most of the worked examples are situated in the field of healthcare. It is not a penultimate book of methods for qualitative synthesis, neither will everyone agree with our particular selection and how we have categorized them. Approaches that have been used in practice but are not covered in our book include narrative summary, thematic analysis, grounded theory, meta-study, cross-case techniques, content analysis, case survey, and qualitative comparative analysis methods. Some of these methods have drawn upon the principles of basic research designs. These adapted versions of basic research methods for the purpose of synthesis are promising, but currently lack the transparency important to a community of researchers involved in systematic reviewing. They offer little guidance on particular aspects such as search strategies, critical appraisal, and sampling of primary studies, neither do they discuss why these should or should not be done. Furthermore, they lack clarity of the particular features of the synthesis approach as compared to other

synthesis methods and have not yet formally been subject to an evaluation of their appropriateness in the context of systematically reviewing literature.

The methods included here are some of the better developed and used approaches available at this point in time; yet no single text has brought them together before, nor provided the diverse and high quality example syntheses that the authors, and in some chapters, originators of the methodology have conducted. Some of the synthesis methods presented are meant to build theory and deepen understanding, while others have been created to develop lines of action for policy and practice or to provide the current state of the art on a particular topic. We feel it is most important that those engaging in a qualitative or mixed method evidence synthesis have a clear understanding of what particular approaches intend to do and which method best fits a researcher's goal and epistemological position.

Most researchers publishing qualitative or mixed-method syntheses do not successfully answer the question of why, among other approaches, they have opted for a particular method. Generally authors state that their choice was influenced by what fits their particular school of thought or by what others have successfully used in the past. The latter is particularly the case for meta-ethnography, currently a very commonly used approach and one of the few that has published methodological guidance. This is a substantive limitation though which offers future reviewers limited opportunities to critique or gain insights from such decision-making processes. This book not only offers to guide readers and potential users in how to apply a particular approach, it also guides general readers through the considerations as to why they should opt to choose a certain approach for their research project. Through the presentation of

worked examples of different approaches, it brings more balance and a more insightful perspective to the options available to researchers. The book does not simply resort to technical reporting of method, but rather focuses on illustrating the challenges users of an approach are likely to come across. These challenges are often hidden or only partly addressed in published articles, where the main interest is to present the content of the work rather than the methodology.

In summary, we believe this book provides a detailed and integrated resource for readers who would otherwise have to piece together methodology from a disparate range of journal articles and other resources. We do not see this book as an end point, since much remains to be learned and written within the field of qualitative and mixed-method synthesis. Instead, we hope to stimulate further pragmatic, intellectual, and methodological curiosity in the richly rewarding field of qualitative evidence synthesis.

Karin Hannes
Craig Lockwood

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We would not do justice to the hard work of the contributing authors on each of their worked examples, if we were not to put them first on our list of people to acknowledge. For some of them the production of their chapters coincided with serious life events, including very positive experiences but also more challenging issues, on a personal or a professional level. Therefore, a special thank you for the commitment and dedication that finally led us to the publication of this book is appropriate. We sincerely thank all academics that have assisted us in completing the initial peer review of the included chapters; Wim Van den Noortgate, Patrick Onghena and Mieke Heyvaert from the Centre for Methodology of Educational Research at K.U. Leuven, and Nathan Manning, former employee of the Joanna Briggs Institute. We also thank the staff members from both our hosting institutes for enthusiastically following up on the progress of the book. In addition, conversations and debates on approaches to qualitative evidence synthesis with methodological experts worldwide and colleague researchers from other research institutes have inspired us to embark on this particular journey, not least the Cochrane Qualitative Research Methods Group, whose convenors have been a wonderful forum for discussion and truly enriched our understanding of evidence synthesis.

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Chapter 1

“It Looks Great But How Do I Know If It Fits?”: An Introduction to Meta-Synthesis Research

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In the past decade, there has been a proliferation of methods to synthesize qualitative research studies. Although several qualitative evidence synthesis methods share common epistemological tenets, developers of these methods rarely make clear how their particular method differs from and is unique to other synthesis records. The following chapter is intended both as an introduction to the book and as a way of making sense of the multiple epistemological, theoretical, and methodological interpretations of qualitative evidence synthesis that are apparent in the synthesis methods that exist today. The chapter provides a general overview of the history and current state-of-the-art of qualitative evidence synthesis. It also includes a general overview of qualitative evidence synthesis methods and a framework to assist researchers in the selection of a synthesis method.

Introduction

Qualitative evidence synthesis, the focus of this book, is defined as the study of qualitative studies (Patterson *et al.* 2001). It is the synthesis or amalgamation of individual qualitative research reports (commonly called “primary research reports”) that relate to a specific topic or focus in order to arrive at new or enhanced understanding about the phenomenon under study. It entails an interpretive process by which “the constituent study texts can be treated as the multivocal interpretation of a phenomenon, just as the voices of different participants might be in a single qualitative study” (Zimmer 2006). In the 1990s there existed few definitive guidelines about how qualitative evidence synthesis could be enacted. Now, a decade later, almost every journal in the health and social sciences contains articles about the need for qualitative synthesis to provide evidence to support clinical practice and to identify directions for future research.

There has been a proliferation of ideas about how to conduct qualitative synthesis, each set of authors offering different insights about how this could be best achieved, and most suggesting that their method is the most credible. However, there exists much confusion about how the various synthesis methods compare to each other and the factors that researchers should consider to determine which method best suits their needs, purposes, and ideological stance. This chapter is intended both as an introduction to the book and as a way of making sense of the multiple qualitative evidence synthesis methods that exist. The chapter consists of a brief overview of the uses and evolution of qualitative evidence synthesis methods, including how the various synthesis methods compare to one another. Following this synopsis, I will detail the factors that researchers

should consider when selecting particular qualitative evidence synthesis methods. In conclusion, I will provide an overview of the contributions of the book to the field of qualitative evidence synthesis.

The Uses of Qualitative Evidence Synthesis

The appeal of qualitative evidence synthesis lies mainly in its ability to effect outcomes that are not feasible or possible in a single qualitative study. By providing a broad overview of a body of qualitative research, syntheses can reveal more powerful explanations that are available in a single study, leading to greater generalizability of the research findings and often to increased levels of abstraction (Sherwood 1999). A synthesis of multiple qualitative studies can also refute or revise the current understanding of a particular phenomenon. For example, a synthesis of qualitative research about the experience of living with a chronic illness (Paterson 2001) resulted in a model of chronic illness that challenged the current notions about the trajectory of chronic illness as linear with one ideal end-point. In addition, qualitative evidence synthesis can assist researchers to: explore differences and similarities across settings, sample populations, and researchers' disciplinary, methodological and/or theoretical perspectives (NHS CRD 2001); generate operational models, theories, or hypotheses that can be tested in later research (Thorne & Paterson 1998); identify gaps and areas of ambiguity in the body of research, thereby revealing directions for future research (NHS CRD 2001); provide a historical overview of the development of concepts or theories over time (Paterson *et al.* 2001); complement the findings or the interpretation of quantitative systematic reviews

(Tranfield 2006); and inform the development of questionnaires or surveys by identifying the significant attributes of a phenomenon (Tranfield 2006).

The Origins of Qualitative Evidence Synthesis

There is some debate as to where the idea of qualitative synthesis first originated. Walsh and Downe (2005) indicate that Stern and Harris were the first to refer to the need for qualitative evidence synthesis, while Paterson and colleagues (2001) acknowledge the work of Statham, Mauksch, and Miller as pioneering this concept. It is generally agreed, however, that the need for a comparative analysis of the findings of qualitative research was stimulated by the explosion of single qualitative research studies in the 1980s and 1990s.

As early as 1997, Sandelowski, Docerty, and Emden (1997) cautioned qualitative researchers that they were in danger of “eternally reinventing the wheel” unless they found some way of identifying and categorizing the relationships between findings of various qualitative studies. At the same time there was growing recognition of the need to use empirical evidence to inform policy and practice (Garrett & Thomas 2004). Researchers began to entertain the notion that qualitative research could be synthesized to contribute evidence to the field. In the quantitative research realm, the method of *meta-analysis*¹ (Glass *et al.* 1981) gave rise to an increasing appreciation for the synthesis of research, particularly as published meta-analyses were shown to contribute many benefits, such as the assessment of empirical evidence and generating theory (Russell 2005). However, until recently, the world of systematic reviews has been

dominated by syntheses of quantitative research using the techniques of meta-analysis. This in part reflects the reputation of qualitative research as less credible and rigorous than quantitative research (Pearson 2004). It also mirrors the competing and often conflicting understandings of what qualitative evidence synthesis is and how to enact it.

Historical Overview

There have been four distinct phases in the evolution of qualitative synthesis. In the first phase in the late 1980s to the 2000s, two educational researchers, Noblit and Hare (1998), delineated the steps of qualitative evidence synthesis in their book about “*meta-ethnography*.” These authors referred to meta-ethnography as involving the comparison, analysis, interpretation, and translation of the findings of individual qualitative studies. Although the method has undergone some recent adaptations, it continues to be one of the most popular synthesis methods.

The second phase in the development of qualitative evidence synthesis methods was the introduction of *meta-study* (2001) in the early 2000s. Meta-study is in keeping with the interpretive paradigm (2001); consequently, this method emphasizes qualitative evidence synthesis as an interpretive process. The developers of this method argue that because qualitative research focuses on meaning *in context*, a synthesis of qualitative research studies must capture how the sociocultural and historical context of the primary research, as well as the research method and theoretical frames of such research, influenced what questions the qualitative researchers asked, their research design, and their interpretation of the data (2001).

The third phase of the evolution of qualitative evidence synthesis in the years following the publication of the text on meta-study is characterized by the inclusion of qualitative research in systematic reviews. The Cochrane Collaboration, which had previously relied exclusively on the results of quantitative studies, developed a Qualitative Methods Group to develop and disseminate methods for incorporating qualitative evidence in *systematic reviews* (Booth 2001). Developers of qualitative synthesis methods that purport to conduct a systematic review commonly typify the Cochrane Collaboration in their understanding of such a review as both systematic and rigorous. They emphasize that if the findings of qualitative syntheses are to be seen as credible and trustworthy, qualitative research syntheses must include a critical and transparent appraisal of the research (Pearson 2004). Such researchers have developed critical appraisal tools and computer data analysis software (e.g., Qualitative Assessment and Review Instrument) for such purposes (McInnes & Wimpenny 2008).

The fourth phase in the history of qualitative evidence synthesis has occurred simultaneously with the third phase. Synthesis methods introduced in this phase focus on integrating qualitative and quantitative research in the following ways: (1) using quantitative meta-analysis and statistical techniques to quantify the impact, quality, and/or relevance of the findings of primary research studies; (2) using qualitative interpretive methods to identify prevalent themes in the quantitative and qualitative research within a body of research; and (3) combining the results of an aggregation of the findings of quantitative research with that of qualitative research and then using quantitative and/or qualitative strategies to synthesize or determine the weight of the evidence of

this aggregated data. An example of a combined qualitative-quantitative synthesis is the work of Thomas and colleagues (Thomas *et al.* 2003) in identifying interventions that promote children's intake of fruits and vegetables. The researchers conducted a meta-analysis of quantitative studies and a *thematic analysis* of qualitative research. Then they developed a matrix to show how effective interventions were connected to children's views about those interventions.

Several researchers (e.g., Sandelowski, Thorne, Noblit) who initially pioneered synthesis methods have evolved in their understanding of how to conduct qualitative evidence synthesis, in part because of the increasing sophistication of understanding in the field of evidence synthesis and in part in response to what funders and other stakeholders now demand in terms of credible evidence. Sandelowski, for example, initially questioned the merit of obscuring the richness of qualitative findings by synthesizing them (Sandelowski *et al.* 1997) but recently, following her experience in synthesizing several hundred qualitative studies about women with HIV/AIDS, she has espoused the quantitative aggregative techniques of *meta-summary* in part as a means of addressing the critiques of qualitative synthesis as lacking standards of rigor and needing to account for issues of credibility and validity in qualitative syntheses (Gough & Elbourne 2002).

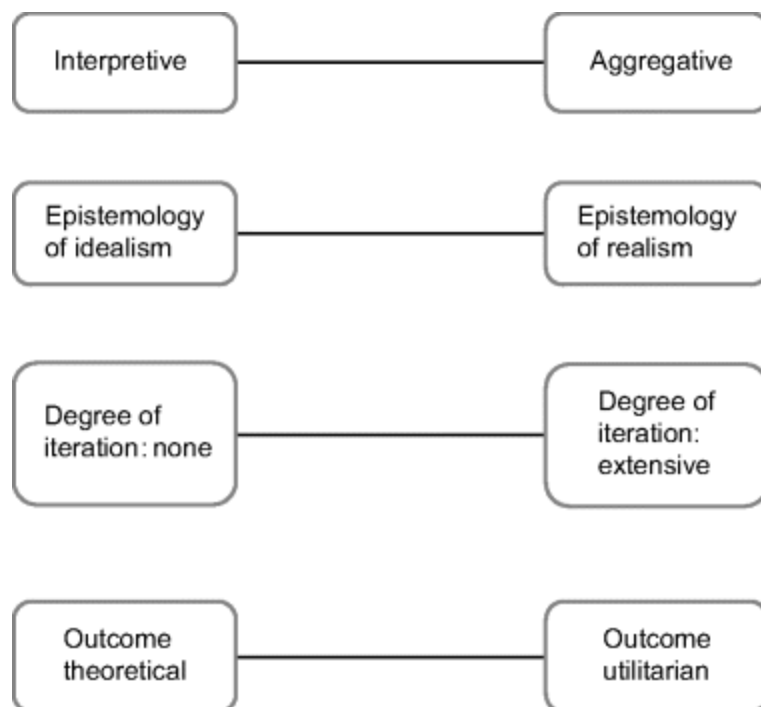
An Overview of Qualitative Synthesis Methods

In 2003, Finfgeld (2003) identified five various qualitative evidence synthesis methods. Since then, at least a dozen more have been developed. Despite their

epistemological, methodological, and terminological differences, qualitative evidence synthesis methods share the common attributes of (1) involving a team of researchers (i.e., it is rare to encounter qualitative research syntheses that involve a lone researcher), (2) investigating a number of primary research reports, and (3) organizing the synthesis according to a concept, theory, and/or research objective (Yager 2006).

Most synthesis methods can be categorized according to where they fit in relation to specific attributes ([Figure 1.1](#)). Three of these attributes (*aggregative/interpretive*, epistemology, and degree of iteration) occur on a continuum; that is, synthesis methods can be categorized according to where they fit in a range between two poles. A defining attribute is whether the method is mainly interpretive or mainly aggregative.

[Figure 1.1](#) Attributes of qualitative evidence synthesis methods.



Qualitative evidence synthesis methods include elements of both aggregation and interpretation, but one

of these is more prominent than the other in each method. Mainly aggregative synthesis methods entail listing the findings of various primary research studies and then further combining them into themes or similar descriptors to produce a general description of the phenomenon under study; they treat the findings as if they are isolated from the contexts in which they occurred. Mainly interpretive synthesis methods, on the other hand, extend the aggregation of findings to produce a new abstract model or theory of the phenomenon under study that considers the context under which the research was conducted, the data interpreted, and the research report written (Gough & Elbourne 2002). Examples of mainly aggregative methods are the systematic review method used by the Joanna Briggs Institute, meta-summary, thematic analysis, *content analysis*, *case survey*, *qualitative comparative analysis*, and *Bayesian meta-analysis* (McInnes & Wimpenny 2008). Examples of mainly interpretive methods are meta-study, *narrative synthesis*, *narrative summary*, formal *grounded theory*, and meta-ethnography (McInness & Wimpenny 2008).

Another attribute of synthesis methods is the epistemological position. The range of epistemological stances in qualitative evidence synthesis methods extends from idealism, wherein the researcher assumes that all knowledge is constructed, to realism in which researchers assume that they see the world as it is (Spencer *et al.* 2003). The developers of narrative synthesis (Popay *et al.* 2007), critical interpretive synthesis (CIS) (Dixon-Woods *et al.* 2006a a), and meta-study (Paterson *et al.* 2001) indicate that the methods represent a 'subjective idealist' method. However, other methods (e.g., *ecological triangulation*, *framework synthesis*, *thematic synthesis*) hold to a more realist