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Content Analysis

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POCKET GUIDES TO
SOCIAL WORK RESEARCH METHODS

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Preface

We are very pleased to have *Content Analysis* join the Oxford Pocket Guides to Social Work Research Methods series. Content analysis is a widely used research method in social work and in allied disciplines and professions. As of March 2015, the *Social Work Abstracts* database showed 551 publications in which "content analysis" was used as a specific research method. Content analysis is often included in social work textbooks, such as those by Rubin and Babbie (2010), Maschi and Youdin (2011), Royce (2013), and Engel and Schutt (2013). However, the textbook discussions of content analysis fall short of clarifying some important variations within the method and in conveying its wide-ranging application to different types of data. The textbook portrait of content analysis unduly limits researchers in understanding the method, its strengths, its optimal uses, and its limitations.

This Oxford Pocket Guide offers a comprehensive overview of the variety within content analysis, along with detailed descriptions of three approaches found in the contemporary literature. This book provides an inclusive and carefully differentiated examination of contemporary content analysis purposes and methods. Such a book is not currently available in the social work literature. This book also includes many illustrations of actual content analyses, along with two full-length studies reviewed in detail. In this way, we hope the book is both conceptual

and practical, guiding the planning of projects as well as the methods to realize their completion. We hope it will be useful to researchers familiar with some forms of the method and will educate those new to content analysis.

In this book, we describe and examine three key approaches to content analysis: (1) basic content analysis, which focuses on manifest content and employs statistical analyses, in contrast to (2) interpretive content analysis, which focuses on both manifest and latent content, and (3) qualitative content analysis, which also focuses on both manifest and latent content. Interpretive and qualitative content analyses draw on narrative analysis methods rather than statistical analyses. Content analytic is neither simple nor monolithic. Understanding the multiple approaches to content analysis now available provides researchers with more choices, greater utility, and enhanced rigor for their projects. Our objective in this book is to help researchers expand their knowledge and fully understand the range of available tools in order to generate better research results.

The three methodology chapters of the book (Chapters 2, 3, and 4) are organized by a consistent outline. Several issues are explored in the same order to differentiate and examine the three approaches to content analysis. For each approach, we address the research purposes, intended audiences, epistemological issues, ethical issues, research designs, sampling techniques, coding techniques, analytic techniques, and the role of researcher self-reflection and reflexivity. Coupled with multiple examples of published studies, this organization can help readers better understand how the three approaches to content analysis are alike or different.

First, we draw a distinction between more *basic* content analyses drawing on literal and manifest content and *interpretive* and *qualitative* approaches that emphasize both context and latent content. In social work textbooks, content analysis is generally portrayed as drawing on manifest content in existing documents. This choice makes the coding process appear literal, where in practice it often requires a great deal of interpretation by the researcher. Literal, even automated, approaches to coding are indeed found in content analyses. However, most social work content analyses involve some judgments by the researcher in understating, interpreting, and coding complex data. Thus, a distinction between more basic, literal, and more interpretive approaches is

fundamental to understanding the variation within traditional content analysis.

Second, there are differences among these methods based on use of deductive approaches to coding and analysis versus use of inductive approaches or use of both approaches in combination. These choices influence how coding is understood and undertaken, and they shape the analytic choices used in content analyses. We will explore content analyses using deductive, inductive, and mixed approaches.

Third, we examine the relatively new set of methods known as "qualitative content analysis." Several recent social work publications have stated that they use qualitative content analysis methods that do not involve quantification or statistics at all. Qualitative content analyses have somewhat different forms in the English-language and German literatures. However, all of these methods find usefulness in content analysis methods that emphasize context and require researcher interpretation and do not involve quantification. We hope to introduce and clarify the key elements of this innovative research method.

Fourth, the development of qualitative content analysis requires that researchers pay greater attention to distinguishing content analysis from other forms of qualitative research. One could argue that *all* qualitative research addresses content, but how and why different methods are applied warrants further conceptualization and clarification. Content analysis may share features with other qualitative (and quantitative) methods, but it is not identical to them. We will explore how qualitative content analysis differs from several other qualitative research methods.

Fifth, we examine the role of epistemology in shaping content analysis. This topic is virtually unexplored in the existing content analysis literature. A key but virtually unmentioned difference between quantitative and qualitative approaches to content analysis centers on epistemology. Most basic and interpretive content analyses appear to draw on positivist or realist epistemological positions. Yet several qualitative content analyses appear to use a constructivist epistemology. We explore such epistemological differences and their effects on content analysis methods in this book.

Sixth, another limitation of the textbook approach to content analysis is a heavy emphasis on the use of existing or secondary data. Many content analyses *do* examine existing data. However, there is also a longstanding tradition of analyzing newly generated, primary data in

both quantitative and qualitative content analyses. Researchers need to understand the range of uses of content analysis to fully identify its potential for generating new knowledge. Using content analysis to examine practice through the statements of clients and professionals has a long history in the social work literature. In fact, one very early application of content analysis in social work used case records to assess the effectiveness of interventions (Dollard & Mowrer, 1947). We seek to help researchers understand the range of uses of content analysis and to illustrate how it has been used in social work and allied professions.

Seventh, we will provide many exemplars of content analyses from the literature and other sources. We hope to *show* how researchers actually *do* content analysis along with *telling* a lot about *how* it is done. The concluding chapters offer detailed descriptions of two content analyses. In addition, each chapter includes summaries of several exemplar studies linked to the content being discussed. This should also make the book clear and useful for classroom teaching.

Eighth, the concluding chapters examine how content analysis can be used in advocacy efforts. Researchers often use content analyses as a data source in support of advocacy efforts. Analysis of documents and newly collected narratives both provide a valuable evidence base for claiming that greater attention is needed to a specific area of interest. Content analyses of both existing and newly collected data can be used in needs assessment, clarification of practice processes and consumer views, and even as a screening tool for some problems. In this way, content analysis fits well with social work practice needs.

Finally, we examine the strengths and limitations of two full-length exemplar studies to illustrate the variety and complexity of content analysis. Many studies are described in considerable detail throughout each chapter of this book. We hope this book will be useful as a refresher for those already familiar with content analysis and as a useful introductory text for those who are learning the methods or its variants.

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Content Analysis

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Introduction

The aim of this Pocket Guide is to distinguish and examine three approaches to content analysis. Many researchers think of "basic content analysis" as a quantitative research method, which is an accurate but limited understanding. Researchers do use word counts as a core analytic technique in basic content analysis. However, researchers also use content analysis without statistical analyses in approaches called "interpretive content analysis" and "qualitative content analysis." In these two approaches, researchers focus on narratively describing the meaning of communications, in specific contexts, rather than on using quantitative word counts. These three varying approaches to content analysis have several similarities and some striking differences. They vary in the ways researchers conceptualize content and employ methods for collecting, coding, and analyzing data.

This book seeks to provide researchers with a comprehensive overview of the variety within content analysis, along with detailed descriptions of each of the three key approaches to it. In this way, the book provides an inclusive, and carefully differentiated, examination of content analysis conceptualizations, purposes, and methods. Such a book is not currently available in the social work literature. We hope it will

be useful to both guide researchers familiar with some forms of the method and educate those new to content analysis.

This chapter opens by offering an inclusive definition of content analysis. This will help clarify some key terms and concepts. Each of the three approaches to content analysis will also be introduced and defined briefly. The literature reveals long-standing differences between quantitative and qualitative approaches to content analysis that are still evident in contemporary published research. This chapter also offers an examination of the origins and evolution of content analysis, as well as the development of content analysis in the social work profession. The aim of this introduction is to provide perspective on the origins, long history, and conceptual foundations of content analysis. Finally, the chapter will offer some brief examples of different approaches to content analysis in order to ground the discussion in practical examples of published research.

WHAT IS CONTENT ANALYSIS?

Krippendorff (2013, p. 24) defines *content analysis* generally as "a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use." These inferences may address the message itself, the sender(s) of the message, the recipients of the message, or the impact of the message (Weber, 1984). Note that both Krippendorff's and Weber's definitions of content analysis go far beyond attention to only the manifest content of a message. *Manifest content* refers to what is overtly, literally, present in a communication. Neither of these definitions of content analysis specify the use of either quantitative or qualitative analytic methods. Further, researchers most often use content analysis descriptively, but they may also use it to generate new concepts and theory and to test theory (e.g., Dollard & Mowrer, 1947; discussed later in the chapter). Researchers can use content analysis to identify and document the attitudes, views, and interests of individuals, small groups, or large and diverse cultural groups. Researchers may use content analysis in evaluation work to compare communication content against previously documented objectives (Berelson, 1952).

Basic Content Analysis

Berelson (1952, p. 18), an advocate of a more literal approach, defined *basic content analysis* as "a research technique for the objective, systematic and quantitative description of manifest content of communication." Note that Berelson's definition would disallow both interpretive and qualitative approaches to content analysis that do not exclusively focus on manifest content and do not always employ quantitative techniques. Neuendorf (2002) similarly defines basic content analysis as techniques using word counts or other quantitative analytic techniques. Neunedorf's definition would also disallow both interpretive and qualitative approaches to content analysis that do not use quantitative analytic methods. Authors of basic content analysis approaches define it as using quantitative analytic techniques that only or predominantly address literal communication content. Meaningful content is assumed to be fully contained in the texts under study. The frequency of word or passage use is treated as a technique to determine the relative importance of specific content. Description and data organization are the key research purposes of such basic content analysis.

Basic content analyses are those approaches using word counts and other quantitative analytic methods to analyze data. Basic content analysts code mainly manifest data using deductively or inductively generated code lists. Quantitative criteria are used to determine the reliability and validity of the coding processes. Basic content analysts typically sample existing texts created originally by others for purposes other than the current research. They seek to be systematic, objective, and transparent.

Interpretive Content Analysis

In contrast, Osgood (1959) defines a more interpretive approach to content analysis, calling it "a procedure by which one makes inferences about sources and receivers [of communication] from evidence in messages they exchange." Holsti (1969) similarly defines content analysis more interpretively as "any technique for making inferences by objectively and systematically identifying specific characteristics of messages." In this more interpretive or inferential view of content analysis, both manifest and latent content may be considered and analyzed

(Baxter, 1991; Krippendorff, 2013; Mayring, 2000, 2010). *Latent content* refers to meaning that is not overtly evident in a communication. Latent content is implicit or implied by a communication, often across several sentences or paragraphs. Berg (2008) defines latent content as the symbolism underlying physically present data. Berelson (1952) uses semiotic theory to distinguish "denotative" and "connotative" meanings of communications in any form. Denotative meanings, the manifest content, are "first-order signifiers" (Eco, 1976) corresponding to literal, common-sense, or obvious meanings (Ahuvia, 2001; Fiske, 1982). Ahuvia (2001, p. 142) states that "connotative meanings—drawn from the latent content—are arrived at by combining individual elements in a text to understand the meaning of the whole." Latent content allows researchers to interpret the whole, or the gestalt, of the communication. Note that many forms of everyday speech, such as irony, sarcasm, and double meanings, require active interpretation of communications rather than relying solely on the manifest content.

Context is another vital component of understanding the meaning of messages. Researchers can, however, reliably and productively code latent meanings using a shared set of interpretive guidelines and by developing a shared understanding of the communication content. How researchers analyze data varies considerably but centers on narrative summaries that reveal and summarize key issues.

While Holsti (1968, p. 601) advocates for a definition of content analysis that goes beyond the quantification of manifest content, he also notes that "the differences between the broader and more restrictive views are not so great as suggested at first glance." Similarly, George (1959b) goes so far as to argue that the "manifest" or "basic" versus "interpretive" distinction may be misleading. That is, both basic and interpretive or qualitative approaches to content analysis require carefully defined and transparently reported descriptions of how the researchers collected, coded, and analyzed the target materials. All good content analysis must be systematic, methodologically based, and transparently reported. Nor is a simple quantitative versus qualitative distinction optimal. As we shall see, many content analyses actually employ both qualitative and quantitative research techniques. That is, the coding of data often involves qualitative coding techniques while the summarizing of data often involves quantitative techniques (George, 1959b). Yet some content analyses (those called interpretive and qualitative approaches) may

not involve quantification or statistics at all (Bloom, 1980). Instead, they focus on summarizing and describing meanings in an interpretive, narrative manner.

Interpretive content analyses are those approaches using researcher-generated summaries and interpretations rather than word counts or other quantitative analytic methods. Interpretive content analysts code both manifest and latent or contextual communication content, typically using inductively generated code lists. Researchers use qualitative criteria to determine the reliability and validity of the analytic processes, though these quantitative terms are still employed. Interpretive content analyses typically draw upon newly generated texts, but they may also examine existing data sets. Interpretive content analyses seek to be systematic and transparent but do not necessarily assume objectivity (Ahuvia, 2001).

Interpretive content analysis shares many features with other qualitative research methods. Issues of epistemology, however, are rarely mentioned, and the use of terms such as *validity* and *reliability* are still widely used. Research methods, including sampling plans, coding procedures, and analysis plans, vary widely but mainly yield descriptive narrative summaries. While qualitative researchers now focus on the credibility and trustworthiness of studies, the interpretive content analysis literature instead emphasizes validity and reliability, perhaps following the now dated work of Kirk and Miller (1985). Interpretive content analysis may overlap with some not very well-articulated qualitative research methods such as "thematic analysis" (Boyatzis, 2000). Ginger (2006) calls interpretive content analysis a flexible research method that may explore key story lines, subjects and objects of texts, normative positions, and the methods used to claim these positions.

While both interpretive and qualitative content analysis publications are found in the social work and other literatures, the methods appear to share many features. Both approaches are still being developed and more clearly defined.

Qualitative Content Analysis

Qualitative content analysis is a relatively recent approach, with origins in German scholarship. Mayring (2000, Section 1) defines *qualitative content analysis* as "an approach of empirical, methodological

controlled analysis of texts within the context of communication, following content analytical rules and step by step models, without rash quantification." Based on the interpretation of texts, focused by the researcher's chosen questions, qualitative content analysis seeks to develop carefully specified categories that are revised and refined in an interactive, feedback-loop process to ensure credibility and usefulness (Mayring, 2000, Section 2). Public justification of the analysis replaces inter-rater reliability, requiring that authors *show* their readers how the analysis was completed, with many links back to the original texts. The analysis of texts in qualitative content analysis involves both the inductive definition of categories and the deductive application of these categories to additional data (Mayring, 2000; Schreier, 2012). Mayring also exclusively cites examples of qualitative content analyses that draw on newly collected data sets, often based on interviews.

Content Analysis Across Approaches

Despite differences in emphases and in analytic techniques, there is strong agreement that *content analysis is a structured research approach, using specified research designs and methods, to make replicable and valid inferences from texts and similar materials* (Krippendorff, 1980, 2013; Mayring, 2000; Neuendorf, 2002; Schreier, 2012). While agreeing on the purposes of content analysis, the more quantitatively oriented researchers emphasize validity, reliability, and objectivity (Berelson, 1952; Berger 1991; Neuendorf, 2002; Riffe, Lacy, & Fico, 2005), while the more qualitatively oriented researchers emphasize validity, replicability, and transparency (Altheide, 1987; Altheide & Schneider, 2013; Mayring, 2000). Despite their differences in terminology, both camps argue that readers should fully understand how the researcher collected, coded, and analyzed the data in considerable detail.

Data Types and Sources

Early definitions of content analysis emphasized the analysis of written texts only, but changes in communication media now encompass a wider range of materials. While many people think of "texts" as written objects that can be "read," others view texts more broadly as objects that can be interpreted to convey an informative message. That is, to

researchers, "text" actually refers to a wide range of communication media that can be stored in many different formats. Researchers have applied content analysis to texts, audio recordings, television shows and movies, images, and telephone calls, as well as to many forms of electronic data, now including social media. Researchers may transcribe some of these other materials into written texts or transcripts, but this is always done with a loss of some information. For example, transcripts of electronically recorded interviews routinely lose the speaker's prosody (rhythm of speech), tone of voice, and inflection. This constitutes a loss of information and detail from the message's original form. However, transcripts may nonetheless capture the core overt content of the message. In such cases, researchers must make choices about the importance of how the content was structured and delivered instead of emphasizing only the core content of the message.

While all content analyses focus on content, some also address form and format (Krippendorff, 1980, 2013; Schreier, 2012). For example, linguists may be interested in how a story was structured and "told" as much as in its subject content (Ahuvia, 2001).

In another example, a content analysis of the images used in advertisements or propaganda may address particular attention to where an image is located, its size, and the context in which it is placed. Similarly, inferences made from propaganda may require extensive knowledge about the history and context surrounding the message to generate a useful interpretation (George, 1959a). Researchers who seek to make valid, replicable, and useful inferences about content may adopt very narrow, or very wide-ranging, concepts of what constitutes content in communication, based on their study goals and purposes.

CONTENT ANALYSIS DEFINED

We define *content analysis as a family of research techniques for making systematic, credible, or valid and replicable inferences from texts and other forms of communication.* We find merit and worth in the application of basic, interpretive, and the more recent qualitative approaches to content analysis. Rigorous content analysis must be based on a systematic approach that is clearly described to the reader and that allows replication by other researchers. As we shall see, which specific methods will

prove most revealing and most useful will differ by the chosen research question and research purposes to which content analysis is applied.

An examination of the origins and development of content analysis methods, discussed next, offers valuable perspective on the method. Content analysis has evolved and diversified as its uses have expanded over time. Content analysis includes several methodologies addressing different research purposes.

THE ORIGINS AND HISTORY OF CONTENT ANALYSIS

The early origins of content analysis are found in political differences and in advocacy efforts. Krippendorff and Bock (2008) point to an early form of content analysis addressing differences in the content of religious hymns. In 1743, the Swedish state church was concerned that the content of hymns created by unsanctioned sources differed from their formally approved content. Dovring (1954–1955) examined several approaches to analyzing the content of the hymns used during the controversy. While contemporary analysts found few actual differences in the content of sanctioned and unsanctioned hymns, methods of counting words and the context of their usage anticipated what have become the core methods of today's content analysis. Formal and detailed in tone, church officials used these content analyses to inform their decision-making processes. They also used these analyses to inform wider public discussion and advocate in favor of their decisions. The summary description of actual hymn content was a useful, empirically based part of a larger disagreement.

Krippendorff and Bock (2008) also found an early form of content analysis in a political commentary published in the *New Hampshire Spy* newspaper, on November 30, 1787. In this commentary, the unnamed author summarizes the elements ("a recipe") of an anti-Federalist essay. The author states that such essays should include the term "well-born" nine times, "aristocracy" 18 times, "liberty of the press" 13 times, and so on. The author goes on to say that this catalog of elements may be "dished up at pleasure" (in any order) to create an anti-Federalist essay (see Figure 1.1).

Krippendorff and Bock (2008, p. 1) state that the *Spy* article is "part political commentary, part literary criticism, and part effort to justify

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Qualitative Content Analysis

This chapter will examine qualitative content analysis. Following an introduction to qualitative content analysis and a brief history, the differences between qualitative content analysis and other qualitative research methods will be briefly addressed. Next, qualitative content analysis will be defined and two exemplar studies analyzed in detail. Further, as in Chapters 2 and 3, this chapter will examine content analysis conceptualization, practical issues, and methods using a standard outline. This structure will guide the reader in both planning a new study and reviewing completed studies. The components of qualitative content analysis include (1) research purposes, (2) epistemological issues, (3) research designs, (4) target audiences, (5) ethical issues, (6) sampling issues and methods, (7) collecting data, (8) coding methods, (9) data analysis methods and (10) the role of researcher reflection. In combination, these 10 components can help researchers appraise the overall integrity and rigor of a content analysis proposal or of a completed project.

INTRODUCTION

Mayring (2010) describes qualitative content analysis as a set of techniques for the systematic analysis of texts of many kinds, addressing not only manifest content but also the themes and core ideas found in texts as primary content. Further, as the name implies, qualitative content analysis does not employ statistical analytic methods. This definition makes qualitative content analysis similar to, yet distinct from, several other qualitative research methods.

Researchers can distinguish qualitative content analysis from other named qualitative research methods with different research purposes and methodologies. For example, discourse analysis examines naturally occurring communication events in terms of sequences, such as speaker turn-taking, propositions, or other forms of speech (Harris, 1952). Sounds, gestures, and syntax may all be foci of discourse analysis studies, as may differences among genres of discourse such as political discourse, media, education, business, and science (Harris, 1985). The focus of discourse analysis and of conversation analysis is on the elements and forms of speech, in contrast to the focus on meaning in content analysis (Gee, 2005).

Critical theory is another scholarly approach using reflective assessment and critique of social and cultural structures through the application of theory and knowledge from the social sciences and the humanities. Drawing broadly on Habermas (1968), critical theory studies use interpretation to explore the meaning of texts and symbolic expressions, including the interpretation of texts that interpret still other texts. Contemporary critical social analyses use self-reflective and reflexive knowledge to understand and explain socially structured systems of power and domination. These critical methods are hermeneutic in nature, requiring extensive interpretation that often goes beyond describing and summarizing the overt content found in texts studied. While qualitative content analyses may involve interpretations of latent content and meaning, broad critical analyses are not commonly their main research purpose. Content analyses usually maintain a more descriptive focus.

Researchers sometimes describe qualitative content analysis as sharing techniques with other forms of qualitative research. For example, Berg (2001, 2008) suggests that "open coding," the first step of coding in

Glaser and Straus's (1967) grounded theory method, may also be used in content analysis. However, the research purpose of grounded theory is to generate locally applicable concepts and theory, while content analysis focuses more on description and generally does not seek to develop theory. Further, no approach to content analysis goes on from initial "open" coding to include Glaser and Strauss' (1967) axial and discriminate coding techniques—all clear parts of grounded theory methods. It may be more useful and more rigorous to differentiate an initial step in the iterative development of grounded theory from descriptive coding of content.

What researchers vaguely label as "thematic analysis" may be most similar to contemporary qualitative content analysis. Braun and Clarke (2006, p. 4) state that thematic analysis is a "poorly demarcated and rarely acknowledged, yet widely used qualitative analytic method." This is equally so in social work publications. Indeed, there is no standard method of thematic analysis. Boyatzis' (1988) thematic analysis appears most similar to what is emerging today as qualitative content analysis. Boyatzis focuses on coding content in texts descriptively, as does qualitative content analysis. Similarly, Saldaña (2009) offers methods for coding descriptive themes that are quite similar to the processes described by Mayring (2000, 2007) and Schreier (2012). Summarizing meaning in primary or secondary data is the focus of thematic analysis. Thematic analysis may be an early, underdeveloped, variant of contemporary qualitative content analysis.

SOME HISTORICAL PERSPECTIVE

The distinction between quantitative and qualitative approaches to content analysis has long been the focus of academic discussion. Kracauer (1952) argued that quantitative approaches to content analysis were often limited. He argued three key points: (1) that meaning is not always manifest; (2) that meaning is often complex, contextual, and best determined holistically; and (3) that some meaningful content may appear only once in a text, which does not necessarily mean it is not important or meaningful. For these reasons, Kracauer argued for developing qualitative approaches to content analyses. Ritsert (1972) pointed out two additional limitations to basic quantitative content

analysis. He notes that the distinctive nature of individual cases may be lost in manifest content analysis and that communications that do not appear overtly in the text may be overlooked. Omissions of expected content, or the removal of content, require contextualized analyses.

Note that both Kracauer's and Ritsert's critiques address several aspects of the content analysis process. Coding becomes more complex if not all meaning is manifest or literal. Both interpretive and qualitative content analyses share this concern. Determining the validity/credibility and the reliability/trustworthiness of codes may also require different standards from those applied in basic content analysis. Further, if meaning is contextual and complex, differences in interpretation may be more common in qualitative content analysis. That is, the different backgrounds and knowledge of each coder may have a greater influence on coding. Such a perspective may be linked to a constructivist epistemology in some research endeavors. Finally, simple counts of word frequencies may not be a sufficient analytic approach. The reductionism inherent in quantification may not adequately capture certain kinds of meanings. This implies that analytic methods other than the use of descriptive or inferential statistics may be required in qualitative content analyses.

George (1959b) also argued for a "non-frequency" approach to content analysis. His work analyzing Nazi propaganda made clear that meaning was often complex, contextual, and "latent." In addition, George, found that pivotal information might be present only once in a number of texts. George's research supports Kracauer's (1952) claim that key evidence may appear only once, or rarely, in collected data. These researchers also point out that such pivotal information might not be valued appropriately by summary statistical analytic methods. Varied research purposes and objectives clearly suggest that a range of content analysis methodologies might be useful.

If a qualitative approach to content analysis is needed, what would such an approach need to include? To begin, the role of content in qualitative research generally must be examined.

The General Role of "Content" in Qualitative Research

It is fair to argue that virtually all qualitative research addresses the *content* of texts, whether the "texts" are books, images, physical artifacts,

audio files, video files, or other media. Qualitative research methods may describe the content found in texts, or they may summarize the key themes found in texts, or examine the process or form of the delivery of content, or seek to develop a conceptualization of the content. Sandeloswki (2000) states that the variety of qualitative research methods makes renewed attention to qualitative description useful and necessary. Yet how to distinguish qualitative content analysis from the wider range of alternative qualitative methods may prove challenging. Indeed, some named qualitative research methods appear to be very similar to qualitative content analysis. Boyatzis' (1998) thematic analysis and Hill's (2011) consensual qualitative analysis both appear very similar to the core methods identified by other authors as qualitative content analysis.

As with many models of qualitative research, there are variations evident within a particular, named research method. Schreier (2014b) listed 11 "named" variants of qualitative content analysis that she found in the international interdisciplinary literature. These ranged from content-structuring analyses, to analysis of images, to evaluative content analyses, to directed analysis and summative content analysis. Qualitative content analysis has several developers and advocates, each with somewhat different emphases and research purposes. All address the content of research data sets to some extent. So just what defines qualitative content analysis?

WHAT IS QUALITATIVE CONTENT ANALYSIS?

Mayring (2010), a German psychologist who appears to have first used the term in 1983, states that *qualitative content analysis* is a set of techniques for the systematic analysis of texts of many kinds addressing not only manifest content but also the themes and core ideas found in texts as primary content. Contextual information and latent content are included in qualitative content analysis. Analysis of the formal aspects of the content may also be included. "Formal aspects" here means how narratives are formatted and delivered; it includes form and processes as well as overt content. According to Mayring (2000, para 5), "qualitative content analysis defines itself . . . as an approach of empirical, methodological controlled analysis of texts within their context

of communication, following content analytical rules and step by step models, without rash quantification." The model is intended to build on the strengths of other content analysis models while respecting context and latent communication. Validity and reliability are emphasized in qualitative content analysis (Mayring, 2000; Schreier, 2012), rather than credibility and trustworthiness, which reflect a more constructivist epistemology. Statistics are rarely, if ever, used in data analysis. Further, the model allows for exploring the complexity of communications in ways that may not be possible through quantitative analyses.

Mayring (2000) cites a number of studies using qualitative content analysis. For example, Vicini (1993) conducted open-ended interviews with educational advisors to identify inductively their theories of advising. Bauer, Qualmann, Stadtmüller, and Bauer (1998) examined the biographies of people with Alzheimer's disease and contrasted their narratives with those of people who had cardiovascular problems. The researchers found more overprotective social networks among the people with Alzheimer's disease. Note that data sets based on newly generated interviews are common in qualitative content analysis (as they are in interpretive content analysis). Qualitative content analysis may be used to explore new topics, describe complex phenomena in open systems, compare and contrast group differences, and develop and test theories.

Sandelowski (2000, p. 338) draws on English-language authors to advocate for qualitative content analysis as the "strategy of choice in qualitative descriptive studies." Drawing on the work of Altheide (1987) and Morgan (1993), she describes qualitative content analysis as a form of analysis for verbal and visual data oriented toward summarizing the informational content of the data set. Sandelowski emphasizes that, in contrast to basic content analysis, researchers typically inductively generate codes from the data rather than apply deductively generated codes derived from prior theory and research. This allows data collection and data analysis to be undertaken simultaneously and flexibly in order to capture context and nuance.

However, in contrast to basic and interpretive approaches to content analysis, a description of patterns or regularities found in the data is the goal of qualitative content analysis (Crabtree & Miller, 1999; Tesch, 1990). Sandelowski (2000, p. 338) states that "qualitative content analysis moves farther into the domain of interpretation than quantitative

[basic] content analysis in that there is an effort to understand not only the manifest (e.g., frequencies and means) but also the latent content of data." Yet she also notes that qualitative content analysis is the least interpretive of all forms of qualitative research "in that there is no mandate to re-present the data in any other terms but their own" (p. 338). This, in Sandelowski's view, makes qualitative content analysis the ideal approach to descriptive qualitative research. Narrative summaries of ideas and themes are common in reports of such research. Indeed, many qualitative studies in the social work literature appear to fit this model of descriptive qualitative research in which the researchers summarize or catalogue the newly collected or existing collected data.

Qualitative content analysis may be a little known and poorly understood but widely used form of social work research. Schreier (2014b) notes that there are "inconsistent explanations as to what actually constitutes the method of qualitative content analysis." Krippendorff (2013), for example, includes discourse or conversation analysis among qualitative content analysis techniques. In contrast to Sandelowski's view, Schreier (2012) argues that researchers may use inductively created or deductive generated approaches to coding or a mix of both. She emphasizes the central importance of coding and validity to qualitative content analysis. Like Sandelowski, Schreier (2014b) emphasizes the descriptive focus of qualitative content analysis as a process for the categorization of selected text meanings. To Schreier (2014b, para 4), "both the creation and the application of the category system is done interpretively and allows for the inclusion of latent content. . . . The approach is systematic, rule governed, and shaped by criteria of validity and reliability." Researchers seek intersubjective and consensual understanding of texts, though not necessarily through the use of quantitative inter-rater coefficients.

Schreier (2014b) states that qualitative content analysis seeks to expand on the textual data on which it is based. In contrast to the data reduction purpose of basic content analysis, qualitative content analyses may actually expand on or enlarge the original data. This is one key difference between qualitative content analysis and the basic and interpretive approaches.

Overall, qualitative content analysis refers to a systematic method for searching out and describing meanings within texts of many kinds (Kohlbacher, 2005; Morgan, 1993). Both manifest and latent content are

examined, as are meanings in context. As we shall see, authors may portray coding in qualitative content analysis as theory based and deductive, or as data grounded and inductive, or as a mix of both approaches. The focus of qualitative content analysis is often on identifying categories or themes that both summarize the content found in the full data set and highlight key content. To achieve this goal, the meaning of content may be interrogated and expanded.

Oddly, researchers do not explicitly address issues of epistemology in the qualitative content analysis literature. Sandelowski (2000) appears to represent a positivist or realist epistemology emphasizing little interpretation, while Mayring (2000), Morgan (1993), and Schreier (2012, 2014b) appear to represent a constructivist epistemological stance emphasizing multiple perspectives and the importance of researcher interpretation. The lack of attention to the shaping role of epistemologies is an area in need of further development in qualitative content analysis.

Examples of Qualitative Content Analysis in the Social Work Literature

The *Social Work Abstracts* database showed 30 qualitative content analyses as of March 2015. Researchers will find many more qualitative content analyses in the larger databases of other professions.

Johnston-Goodstar, Richards-Schuster, and Sethi (2014) examined the online mission statements and written descriptions of youth media programs. Their research questions included, "How do youth media practitioners articulate their 'work'?" and "What frameworks do they use?" While the authors note the need for further development of ethical standards for online research, they do not specifically address obtaining institutional review board approval. This was likely due to their use of public online documents that do not appear to contain more than everyday risks. The researchers analyzed and reviewed materials from 49 youth media programs, inductively identifying main categories such as "youth media as a tool for empowerment," and "youth media as a tool for social action" (p. 4). Subcategories within the empowerment main category included "building leadership skills," "promoting leadership and self-confidence," and "telling their own stories" (p. 4). The authors cite Braun and Clarke (2013) as their methodological source in applying key qualitative content analysis methods to publicly available

online data. (Braun and Clarke's textbook specifically addresses content analysis on only one introductory page.)

In another example, Chan et al. (2012) collected narratives about contemporary filial piety and end-of-life care from 15 Hong Kong Chinese caregivers. The sample included stage IV terminal cancer patients at one hospital. With prior university institutional review board approval, the researchers solicited caregivers through purposive sampling. The researchers used what they called a modified grounded theory approach to coding. Yet they also stated that they sought to generate descriptive themes within the participants' narratives rather than a conceptual model or mid-level theory. (As noted earlier, open coding in grounded theory is the first of three iterative stages of coding. It is also focused on developing concepts rather than simply summarizing or describing views and events—the descriptive focus of qualitative content analysis. The technique of open coding is applied here to a different research purpose than that of grounded theory research.) Chan et al. used Neimeyer's (2001; Neimeyer & Sands, 2011) methods of "meaning reconstruction" for their analysis.

Chan et al.'s team of researchers coded five themes or main categories, including "reciprocal relationships and mutual support." The themes described contemporary views of filial piety that they contrasted with more traditional cultural views. For example, Chinese parents traditionally have expected their children to conform to their wishes without resistance. Contemporary caregivers, however, often have to look after their parents while maintaining work commitments and providing care for their own children. This might involve negotiations requiring some flexibility of both the parent and caregiver. The researchers used the category "reciprocal relationships" to describe the more flexible nature of these interactions, in contrast to traditional expectations of deference to the parent's wishes. Participants might not have used the specific terminology of the category label; therefore, an interpretive analysis was required. The researchers captured the meaning of the participants' narratives in the codes, though the specific content of their stories differed. No statistics were used by Chan and colleagues.

Qualitative content analysis can be a useful research method for the study of diverse populations. It may be undertaken in a culturally competent manner to overcome a number of limitations present in other research methods (Lee & Zaharlick, 2013).

RESEARCH PURPOSES OF QUALITATIVE CONTENT ANALYSIS

As noted previously in the definitions of qualitative content analysis, many authors view it as an optimal method for describing meaning in communications (Mayring, 2000, 2010; Morgan, 1993; Sandelowski, 2000; Schreier, 2012). One aspect of such description is frequently to categorize the manifest and/or latent and contextualized content into a narrative summary. Such categorization may be topical, formal, or hierarchical. Qualitative content analysts generally view their approach as more focused on description than on conceptual development; yet any form of categorization will arguably involve some degree of abstraction. Categorization is also a form of data reduction or summarizing that may be useful in analyses of large data sets or simply to clarify the key points within texts. Schreier (2014b) also suggests that qualitative content analysis may expand on the original data and actually enlarge it.

Krippendorff (2013) has identified three kinds of research designs to which content analysis may be applied: (1) exploratory/descriptive, in which knowledge of content and contexts is described or more clearly defined; (2) explanatory tests of hypotheses that examine the merit and utility of specified analytical constructs; and (3) explanatory tests of discriminant function that affirm or negate the explanatory power and utility of specified constructs. Qualitative content analysis can be applied to both the exploratory/descriptive purposes Krippendorff addresses and qualitatively testing the merits of specific analytic constructs. Qualitative content analysis could also serve as a starting point for later quantification and explanatory research using discriminate function or path analysis techniques. Neimeyer (2001) also views qualitative content analysis as a potential first step toward a later quantities analysis. There are, however, no clear examples of such uses in the social work literature to date.

EPISTEMOLOGICAL FOUNDATIONS OF QUALITATIVE CONTENT ANALYSIS

All research of merit begins with a good research question (Drisko, 2013b). Criteria for identifying a good research question include its importance, fruitfulness, timeliness, interest to a specific audience, and utility to problem-solving. Assuming a worthy research question is

posed, *how* the question will be examined is the next step. A key step is to select an epistemology to guide the research project. Epistemological choices influence in important ways several later decisions about research methods and the interpretation of research results.

Surprisingly, the literature on qualitative content analysis does not explicitly address the role of epistemology. Hints about the role of epistemology are found throughout this literature, but little direct discussion is evident. For example, Schreier (2012) lists and contrasts features that distinguish quantitative and qualitative research. She includes attention to naturalistic studies (rather than those involving manipulation), the importance of context, inferences based on context, author and recipient of communication, and elaboration rather than the reduction of data. Yet many American scholars would view the importance of these elements as being due to non- or post-positivist or constructivist ways of knowing. Many core issues raised in the qualitative content analysis literature seem to center on the role of epistemology in research.

Some scholars argue that *all* qualitative research is constructivist in epistemology (Denzin & Lincoln, 2005). Denzin and Lincoln base their position on a vision of qualitative research as situated in specific contexts and the co-creation of results by participants and researchers. Constructivist research is defined by an epistemological stance: that social knowledge is the active product of human "knowers," that knowledge is situated and relative, that it varies across people and their social groups, and that it is context-dependent (Drisko, 2013a). Experiences in the natural and the social world are "constructed" using the interpretive categories of one's reference group. There are multiple realities based on peoples' varied interpretative constructs and categories (Drisko, 2013a). Constructivists do not deny the reality of the external world; rather, they understand that knowledge of the world is related to the ways in which we actively organize our experiences of it (von Glaserfeld, 1984). In many respects, qualitative content analysis presumes that contextualized and latent communications may not be immediately evident to all readers. Differences in interpretation are understood as inevitable; what is important for research is to make explicit how and why interpretations were made. How to make useful and meaningful interpretations of latent and contextualized data is central to qualitative content analysis.

Explicitly adopting a constructivist epistemology for qualitative content analysis has consequences for how the method is conceptualized and undertaken (Drisko, 2013b). The use of positivist, quantitative terminology, including the terms *validity* and *reliability*, is problematic from a constructivist epistemology. Many qualitative researchers acknowledge multiple ways of knowing and multiple perspectives on a single event or idea. *Credibility* and *trustworthiness* are the terms used in place of *validity*, reflecting multiple standpoints and meanings (Drisko, 1997; 2013a). The concepts of credibility and trustworthiness do not assume simple correspondence between facts or experiences and the ways people describe or make meaning of these facts or experiences. Further, qualitative research generally seeks to be meaningful in context rather than universally applicable. Confirmability and completeness or saturation also matter in qualitative research. Member checks—collaborative reviews of data summaries and analyses with research participants—is a technique used to ensure that reports reflect the voices and views of others. Of course, member checks may not be possible with authors of some texts, but they are frequently possible with research participants who offer new data for content analysis. Confirmability, accuracy, and trustworthiness replace statistical approaches to reliability in studies using a constructivist epistemology (Drisko, 1997; 2013b). Generalizability is inherently limited to specific people in a specific era and context. Yet virtually none of these concepts or issues are explored currently in the English-language or German qualitative content analysis literature.

Qualitative content analysis, across its several variants, appears to draw on a constructivist epistemology. Such an epistemology would fit well with the interpretive emphasis of this approach. More direct exploration of how epistemology influences qualitative content analysis and its research methods would be very useful and timely. Such exploration may also be useful in clarifying the differences between interpretive and qualitative content analysis and among the variants of qualitative content analysis.

RESEARCH DESIGNS IN QUALITATIVE CONTENT ANALYSIS

Most scholars view qualitative content analysis as descriptive in focus and design (Mayring, 2010; Sandelowski, 2000; Sandelowski & Barroso,

2003; Schreier, 2012). While the method clearly describes key meanings within a data set, it may also be useful as an exploratory research design used to identify new ways of looking at events and communications (Sandelowski & Barroso, 2003). That is, qualitative content analyses of new phenomena or diverse populations or novel settings may simultaneously *explore* new intellectual territory as it *describes* what was found. For example, the Chan et al. (2012) study detailed earlier appears to be both exploratory and descriptive in design simultaneously. Qualitative content analyses may be exploratory in design, descriptive, or both at once.

Schreier (2014b) points out that qualitative content analysis may be used for *evaluation, comparative designs*, and even in *explanatory* research designs. For example, Kuckartz (2012) applied qualitative content analysis using rank-ordered categories in order to evaluate individual and group differences. Researchers could use such comparative methods to test hypothesized differences among groups. For example, Bauer et al. (1998) compared the biographies of persons with Alzheimer's disease to those of persons with cardiovascular problems. Given a set of guiding hypotheses that prior research suggests differentiate these two populations, a qualitative content analysis could be one way to test that such group differences are empirically grounded.

Mayring (2010) further suggests that qualitative content analysis may be used to more fully explicate the meaning of a text. In Mayring's model, aspects of text and context are examined jointly to show more fully how meaning is shaped. This allows for an explanation of the meaning(s) found in a text, as well as for a description of how such meanings are conveyed. Schreier (2014b) points out that such an explicative use of qualitative content analysis actually expands and enlarges on the original material. This is a very different research purpose than the more typical data-reductive aspect of most content analyses.

Data Reduction in Qualitative Content Analysis

Schreier (2014b) states that qualitative content analyses may involve data reduction through the analytic use of descriptive categories or themes. The goal in such studies is to identify and highlight the most relevant and meaningful passages of text. Researchers may also illustrate the kinds of variation found within specific categories or themes.

Qualitative content analysis may summarize larger data sets and generates typologies of content related to the researcher's purposes and questions.

Schreier (2014b) also notes that qualitative content analyses may interrogate, expand on, and enlarge the data in order to explicate its meaning and its nuance. While reports of qualitative content analysis may provide a reductive summary of that data under study, the process of generating this summary may be expansive rather than reductive. Such an expansion of the data during analysis is a key feature of qualitative content analysis.

TARGET AUDIENCES FOR QUALITATIVE CONTENT ANALYSIS

There are very few qualitative content analyses in the social work literature. Twenty-eight articles and five dissertations between 1979 and 2014 were listed in the *Social Work Abstracts* database as of March 2015. These studies explore diverse topics, including youth media, pro-anorexia perspectives, financial planning, social policy, and professional education. It appears that most of these studies target other academics and practitioners as their key audiences.

At the same time, most qualitative content analysis reports include advocacy for particular points of view or for specific practice or policy efforts. Advocacy efforts based on qualitative content analysis routinely involve abductive inferences. That is, authors use the qualitative content analysis findings as a jumping-off point for wider advocacy claims that extend somewhat beyond the data. For example, Johnston-Goodstar, Richards-Schuster, and Sethi (2014, abstract) completed a qualitative content analysis on youth media. They also applied a critical media literacy framework "to analyze the practice of these youth media groups and apply those findings to social work practice, education, and research." The authors then used the findings of the qualitative content analysis abductively as an evidence base for making related advocacy claims. These advocacy efforts may extend abductively beyond the actual data, showing how the data can inform applied improvements in practice and policy. Such abductive arguments are also common in basic and interpretive content analysis. The rigor of the qualitative content analysis either can serve to

strengthen the argument for such advocacy or may help point out its limitations.

ETHICAL ISSUES IN QUALITATIVE CONTENT ANALYSIS

Given prior harms to human research participants done by well-intended researchers, it is always wise and ethically sound to seek a formal institutional review before undertaking any research involving people. Ethics review regulations in the United States allow institutional review boards to determine that studies are exempt from review where risks are no greater than everyday hazards, to allow an expedited review where risks are slight, or to require a full review where risks are potentially more serious. Researchers doing any form of content analysis should seek review of their projects by an authorized ethics review board.

Readers will find a more complete discussion of ethical issues pertinent to both basic and interpretive content analysis in Chapter 2. A summary of ethical concerns specific to interpretive content analysis is offered here.

Qualitative content analyses may employ either existing data sets or newly collected data. Where existing data are used and draw from materials in the public domain, review by an institutional ethics panel may not be required. Altheide and Schneider (2013) minimally address the place of ethics and informed consent in their book, *Qualitative Media Analysis*. This may be because they view the use of publicly available media as open for research use. However, many studies in the English- and German-language literature involve the collection of new data from human research participants via interviews. Vicini's (1993) interview-based analysis of theories of educational advising is an example of the use of newly collected data in qualitative content analysis. Studies drawing on newly collected data from human research participants will always require institutional ethics review. It appears that qualitative content analyses are more likely to involve the collection of new data than are basic or interpretive content analyses, though *all* approaches to content analysis may use such data.

As noted in Chapter 2, use of certain electronic data sets, such as social media postings, may constitute a gray area for ethics review and informed consent. People who post to such sites may not view their

information as public, though this may be a naive viewpoint. Where such data are used in content analysis, institutional review is indicated to avoid ethical missteps.

To date, there appears to be very little discussion of ethical issues in the qualitative content analysis literature. Ethical issues are not mentioned in Schreier's (2012) text on qualitative content analysis practice or in its index. This omission persists despite the publication of many articles identified as qualitative content analysis that use newly collected data. Indeed, the qualitative content analysis literature emphasizes the use of newly collected data sets (see, for example, the illustrative studies mentioned by Mayring 2000, 2010; and by Schreier 2012, 2014b). Researchers must undertake further conceptualization to clarify the ethical issues posed by qualitative content analyses.

Prior institutional review of all research involving the collection of new data from human research participants should always be undertaken. Such projects should all have prior ethics review board approval. Notice of this approval, and efforts to protect human research participants, should be briefly reported in all publications using the data set.

SAMPLING IN QUALITATIVE CONTENT ANALYSIS

Scholars minimally address the topic of sampling in the current qualitative content analysis literature. Neither Schreier (2012) nor Mayring (2000) specifically addresses sampling as a topic. Sandelowski (2000) and Zhang and Wildemuth (2009) argue briefly for the use of purposive sampling in qualitative content analysis. Only Elo et al. (2014) have addressed sample size and representativeness in terms of how such decisions influence the transferability and trustworthiness of a qualitative content analysis. Yet the nature of the sample may strongly affect the credibility and applicability of a qualitative content analysis.

The authors of most social work texts typically conceptualize qualitative research sampling as a single, fixed step occurring before data collection (Drisko, 2003). This conceptualization is incomplete and often misleading: Qualitative sampling is better understood as an ongoing iterative process co-occurring with data collection and data analysis (Drisko, 2003; LeCompte & Preissle, 1993). Such iterative sampling helps in obtaining an adequate and thorough sample for descriptive studies

of groups or other open systems that do not have fixed and invariant boundaries. Iterative sampling is also helpful in providing a complete basis for theory development. Further, terminology related to qualitative research sampling is used inconsistently in the research literature, reducing clarity for readers and learners alike (Drisko, 2003).

Sampling and the Quality of the Data Set

Some standards for qualitative sampling can be identified in the literature. First, samples for qualitative research must be appropriate to the research question, whether they are fixed prior to data collection or iterative (LeCompte & Preissle, 1993; Maxwell, 1996; Miles & Huberman, 1984). Second, samples must be "information rich" (LeCompte & Preissle, 1993; Patton, 1990, p. 169). That is, samples must be adequate to the exploration of the research question (Patton, 1990). Fortune and Reid (1999) note that research samples may fail to provide requisite information. For example, a study of couples' interactions may include only one partner rather than both. Such a sample is neither appropriate nor adequate.

Another hazard of sample selection prior to data collection is that the obtained sample may not provide information that is adequate for thorough exploration of the research question. A flexible, iterative approach to sampling allows different types of sampling efforts to ensure adequate information. A key strength of the iterative sampling process is the opportunity to expand or otherwise alter the sample to provide adequate information. A third standard for qualitative research samples is that samples must be thorough in the sense that they include potentially disconfirming or elaborating evidence (LeCompte & Preissle, 1993). This idea may be implicit in the second standard but merits explicit statement. The obligation to seek and examine potentially disconfirming evidence is central to rigorous research (Drisko, 1997, 2013b). Yet another strength of iterative sampling is that there is both the expectation and opportunity to seek cases that can challenge or enhance the researcher's initial understanding of the research question.

Elo et al. (2014, p. 4) state that "a disadvantage of purposive sampling is that it can be difficult for the reader to judge the trustworthiness of sampling if full details are not provided." Solid, transparent, descriptions of sampling plans are needed to ensure rigor in qualitative content

analysis. Further, readers often have to determine if the results of a particular sample are transferable to people and settings of their interest. Small purposive samples often point to potentially important and useful results in an exploratory manner, but critical thinking and additional research are often needed to ensure transferability of results to other settings and populations. As in most qualitative research, the yield of qualitative content analysis generally suggests new ways of thinking or doing practice. It raises reader's awareness and theoretical sensitivity but does not claim to demonstrate transferability. The applicability of qualitative content analysis results to new setting must be tested in the new settings to demonstrate their usefulness.

It is worth noting that the generalizability of most quantitative studies, including quantitative content analyses, is often similarly limited. Generalizing from probability samples is limited to the population from which the probability sample was originally drawn. If this is a set of documents, or even a listing of social workers from a single state, the generalizability of results only extends to the original population of texts or to the social workers within the single state. Care must always be taken in applying the results of research to populations and settings beyond that used in the original study.

Qualitative Sampling Terminology

Qualitative research may employ probability sampling methods if they adequately address the research question and purposes. (Probability sampling is examined in depth in Chapter 2 of this book.) However, most qualitative studies and qualitative content analyses employ non-probability or purposive samples. There are several forms of purposive sampling.

Purposive sampling is employed to raise awareness, provide new perspectives, or provide descriptions of events, beliefs, and actions. That is, a profile of some action, attitude, event, or belief is developed from the data provided by several informants or texts. The data set seeks to describe unknown information or perspectives, explicate new meanings, and create new awareness and sensitivity in the reader. This informative, or sensitizing, use of purposive sample selection is relatively free of risk as long as no claim of transferability or generalization to a larger group with different characteristics is implied (Patton, 1980). It may,

however, be overreaching to claim that purposive sample selection alone can provide an accurate portrait of the group from which it is drawn. Any such claim of transferability is made more difficult when the group is an open system lacking clear and fixed boundaries. Transferability is analytic and inductive, not numeric or probabilistic (Patton, 1990).

Many other named techniques of sampling are also purposive in nature. Patton's (1980, 1990) "*typical case*" sample selection targets average cases. Such cases may be very appropriate in descriptive qualitative research and in qualitative content analysis. One significant challenge to such typical case selection is that it requires, prior to case selection, that "certain information must be known about the variation among cases" (Patton, 1980, p. 100). Such information is often unknown to the researcher. This is especially so when the researcher is studying an open system or group with no obvious or fixed boundaries, or when the researcher has no prior theory on which to draw. For example, the "typical user" of a mental health clinic may not be determined without prior information or considerable observation and interviewing. Nomination of typical cases by group members may be helpful but is not necessarily accurate or complete. The clinic's administration may be able to profile typical cases on a quantitative basis, but this does not guarantee that these people will be able to provide useful and information-rich data.

Critical case sampling focuses on theoretically determined key informants (Patton, 1990). Critical cases are selected to provide particularly valuable perspectives and insights. They may be pivotal cases, "bellwether" cases, or cases that provide additional theoretical and perspectival richness in contrast to typical cases. *Intensity sampling* has a similar logic (Patton, 1990). Cases are selected that are theoretically determined to offer depth and/or breadth on a given event, belief, or other topic of interest. Researchers purposefully select such cases over others for their potential to yield valuable information and to clarify the impact of contexts. In both methods, transferability or generalization is not typically sought nor expected; information richness on a selected topic is the key concern.

Unique, unusual, or *extreme case sampling* methods are techniques that are also purposive (Patton, 1990). Via nomination, or using observation, such unusual or extreme cases are identified and included in the sample. Extreme cases offer perspectives that are often unheard or undervalued. They can also supplement information gained more

readily from typical cases in an iterative sampling process. Identifying extreme cases also requires some prior knowledge or, alternately, a concurrent appraisal of typical cases from which to distinguish the extremes (Patton, 1990). Unique or extreme cases can also provide perspectives that elaborate or enhance one's understanding of typical cases (Znaniecki, 1934). However, transferability is abstract and analytic, based on the apparent relevance or utility of the new awareness in other situations, rather than on any numerical measure of representativeness (Patton, 1980; Robinson, 1951; Znaniecki, 1934). "Logical generalization can often be made on the weight of evidence" (Patton, 1980, p. 103; see also Znaniecki, 1934).

Maximum variation sampling has a similar purpose but requires initial efforts to identify and include multiple perspectives on dimensions of interest to the researcher (Guba & Lincoln, 1989; Patton, 1980). Used descriptively in conjunction with typical case sampling, the two sampling techniques together can profile both typical cases and the range of variation around the typical cases. The completeness of the obtained sample remains uncertain, however, and transferability is analytic rather than quantitative and probabilistic. Combined typical case and maximum variation sampling would be a strong plan for many qualitative content analysis studies.

Iterative Sampling

Many prominent qualitative researchers argue that an iterative or cyclical approach to sampling yields optimal samples (Glaser & Strauss, 1967; LeCompte & Preissle, 1993; Patton, 1980). Iterative sampling is a process through which researchers review and revise their initial sampling plan based on the results of preliminary data collection and data analysis. Newly discovered information is then used to guide future sampling decisions. A cycle of sampling, data collection, and data analysis is employed to identify gaps and omissions in the sampling plan. The cycle also yields data that are thorough to the topic under study and therefore most useful for guiding data analysis and research reports. Researchers must be self-aware and reflective to avoid obtaining a biased sample or one that does not allow for variation in meanings or viewpoints as best as this can be established. The central concept is that what emerges from data analysis will shape subsequent sampling decisions. The iterative

cycle continues until researchers reach *saturation*, the point at which no new information or new themes result from additional data collection and analysis.

When researchers use qualitative content analysis in an exploratory manner, small samples without an iterative sampling process can yield innovative and informative results. When researchers use qualitative content analysis in descriptive research designs, however, an iterative sampling plan should yield more complete and more nuanced results.

DATA COLLECTION IN QUALITATIVE CONTENT ANALYSIS

Elo et al. (2014) state that data collection in contemporary qualitative content analysis is most often based on newly gathered verbal data such as interview transcripts. Indeed, the studies cited by Schreier (2012) draw predominantly on interviews or on first-person narratives. One challenge in collecting such descriptive data is to maintain a focus on relevant content while preventing interviewer-generated bias or interviewer emphasis on a single viewpoint or perspective.

Open-ended questions allowing for a wide range of responses are optimal. Researchers also use semi-structured interviews effectively, though they must take care not to privilege one perspective over others. This may be a hazard where previous work points to a predominant or favored viewpoint or meaning. Researchers must be careful that deductively generated questions or emphases do not exclude efforts to seek out other potential points of view and meanings. It is recommended that questions be developed with input from knowledgeable individuals and pilot testing with an emphasis on ensuring that participants are free to respond with a variety of viewpoints (Pyett, 2003).

The self-awareness and reflective skill of the researcher is vital in planning and undertaking data collection. The clarity of the questions asked or used to select texts is of primary importance to obtaining optimally diverse and credible data. In addition, ongoing review of the collected data, in collaboration with colleagues serving as peer reviewers, can help limit bias or manipulation of participants. Commentary on research questions and methods is also a valuable source of revision to data collection techniques and strategies.

While most qualitative content analyses employ single-interview or single-narrative data, multiple interviews and repeated narratives may help ensure that any particular viewpoint or meaning is credible and reflects the participant's views fully. Padgett (1998) argues for prolonged exposure as a technique for collecting the best possible data. This recommendation may also be applicable to data collection in qualitative content analysis.

CODING IN QUALITATIVE CONTENT ANALYSIS

The first step in coding qualitative data is to become very familiar with the data set. Some scholars call this step "immersion" in the data (Miles & Huberman, 1984). Such immersion in the data set provides a sense of the study as a whole and of its component parts. It helps build awareness to context and nuance, which is important in qualitative content analysis. The goal is for the researcher to become informed about the content in context, to begin to notice key content and omissions of what might be expected content or perspectives, and to begin to identify connections within the data and preliminary categories. The purpose of coding is to develop new knowledge and to address fully the research question that frames the study. Rigorous coding requires wide-ranging, in-depth knowledge of the data set.

Schreier (2012) points to coding as a defining feature of qualitative content analysis. Researchers use coding to identify and describe key meanings within texts of many kinds. Coding is also used to reduce and summarize those meanings that are most relevant to answering the research question. In contrast to some other qualitative approaches to coding, Schreier (2012) views coding in qualitative content analysis as solely descriptive; it is not intended to begin a conceptual analysis of the content. Yet one might argue that coding, when not used merely to label segments of the data set (as is done in eidetic phenomenology) *always* involves some conceptualization. Yet Schreier emphasizes only its descriptive function. She suggests that this is one important way in which qualitative content analysis is distinguished from other qualitative research methods. Sandelowski (2000) similarly emphasizes the central role of descriptive coding in qualitative content analysis.

Given that qualitative data sets may involve literally hundreds of pages of text or other data, the first step is to identify the main categories. Main categories are also called *themes* or *dimensions* in the qualitative content literature. The term *themes* is often found in the American qualitative research literature, though its definition is broad and often imprecise (Braun & Clarke, 2013). The term *dimensions* may also be confusing to some readers familiar with other qualitative research methods, such as grounded theory, in which a dimension refers specifically to a rank-ordered concept (Glaser & Strauss, 1967). In qualitative content analysis, main categories are most often nominal-level categories that are mutually exclusive and exhaustive to the focal content (Schreier, 2012).

Once the researcher identifies main categories, subcategories are specified to elaborate on the detailed content. The subcategories serve to structure the description within each category while also providing more detail and nuance. Subcategories may also be viewed as nominal-, ordinal-, or interval-level measures (Mayring, 2010; Schreier, 2104b).

All coding requires that the researcher make ongoing determinations of what is relevant and revealing content versus that which is irrelevant (Schreier, 2012). As Krippendorff (1980, p. 76) states, "how categories are defined . . . is an art." The process of creating a coding frame, or list of codes relevant to a specific project, may be undertaken inductively, deductively, or using both approaches.

Inductive and Deductive Approaches to Coding in Qualitative Content Analysis

Several authors argue that qualitative content analysis is, in part, defined by the use of inductive approaches to coding (Mayring, 2000; Schreier, 2012). They contrast the use of "emergent" coding derived from the data as a central feature of qualitative research, in contrast to the deductive approach used in most quantitative research. Qualitative content analysts use inductive coding to create data-grounded categories and to ensure that the views and voices of research participants are given priority over the ideas and theories of the researchers. Used in exploratory and descriptive research designs, inductive coding can help keep the development of coding categories close to and grounded in the original data.

That said, a variety of coding approaches are found in the published qualitative content analysis literature. Mayring (2000) has described both inductive and deductive processes for developing coding categories. Schreier (2014b) has identified a range of qualitative content analysis models that use each process or both in combination.

Inductive Coding Development and Application

In inductive coding, researchers first formulate a working definition of a category drawing on the textual material that best captures the meaning of the content found in the original data. Initial use of "open coding" following Glaser and Strauss' (1967; also Strauss and Corbin, 1998) technique is often suggested. However, open coding in qualitative content analysis is substantive rather than focused on conceptual development. Researchers identify relevant categories and label them descriptively. Coding should initially be over-inclusive as the researcher learns and refines the meaning of the texts. Each coding category should be relevant, close to the original content, and modifiable.

One technique is to use in vivo codes (Glaser & Strauss, 1967; Strauss & Corbin, 1998), which use a word or a short phrase from the original content to literally reflect the essence of the content's meaning. Note, however, that in vivo coding may assume that the manifest content of the data is all that is needed to convey its meaning successfully. This appears a bit ironic in qualitative content analysis, a method in which latent content and its interpretation are highly emphasized. Regardless of how the researcher does initial sampling, the initial coding list will be iteratively refined as sampling, data collection, and data analysis proceed across multiple texts or participants.

Several publications self-described as qualitative content analysis refer to the use of Glaser and Strauss' (1967) grounded theory as their method of coding. It is important to understand that grounded theory research seeks to develop mid-level theory of practice or meaning making in a particular situation or setting. The goal of grounded theory is to develop concepts and ultimately a working theory that captures the views and actions of the research participants. Grounded theory is not a descriptive research method but a conceptual method, as should be evident from the name of the method. In contrast, qualitative content analysis is most often used descriptively rather than to develop concepts and theory. The yield of qualitative content analysis is most often descriptive

categories and themes; conceptualization and theory are not often part of the method. In turn, the aim of coding in qualitative content analysis is not to generate concepts and theory, but instead to describe the meanings and actions of research participants and texts. Researchers must correctly understand and represent the purposes and goals of these two different research methods.

Category Development

Mayring (2000) states that inductive category development begins with defining central categories and clarifying the level of abstraction among them. As codes are developed, the next step is to determine which codes are more overarching and which are subsidiary to these central codes. A hierarchy of codes is created, with central codes as the key categories and many subsidiary codes elaborating the content in greater detail across several dimensions. Mayring (2000, para 11, Figure 1) states that after 10% to 50% of the texts are coded a "formative" reliability check of the coding frame should be undertaken and revisions made as needed. Revisions will include discarding rarely used codes (so long as they are not central to addressing the research question) and reviewing the coding hierarchy. Using the revised coding frame, the coding process then continues to completion. When coding of all texts is completed, another "summative" reliability check of the coding frame is completed (Mayring, 2000, Figure 1).

According to Mayring (2000), both the formative and summative reliability checks may lead to iterative revisions of the research question or changes in the coding categories. After the coding frame is finalized, interpretation of these inductively generated results is undertaken. While Mayring (2000) does not directly discuss the validity of the inductive coding frame, researchers should also examine how the coded material fits with and elaborates on the entire data set. Since coding may be contextual and may draw on latent content, one key issue is to create a transparent "map" of how the codes were created that is credible and clear to the reader. In studies using a constructivist epistemology, readers will be the final arbiters of the credibility and persuasiveness of the researcher's coding frame and interpretation of the data. Sufficient raw data must be provided to the reader to question and interrogate the researcher's coding work (Drisko, 2013a, 2013b).

Deductive Coding Application

Some models of qualitative content analysis begin with an orienting theory or evaluation question that allows the deductive development of at least some of the codes used in the study. In deductive coding, prior empirical research and theory are employed to derive some categories. Mayring (2000) claims that the processes for developing deductive categories are poorly developed in the qualitative content analysis literature. Mayring (2000, para 14, Figure 2) suggests that deductive category development begins with the identification of "main and subcategories from the existing literature." From this material, the researchers formulate coding definitions and/or rules. After coding part of the data set with the deductively generated categories, researchers can undertake a formative reliability check. In this formative check, examples of coded content are compared to the deductive coding frame to ensure reliability. The full data set is then coded. After coding is completed, the researchers complete a summative reliability check to again ensure reliability and the consistent application of coding rules.

While Mayring (2000) does not directly discuss the validity of the deductively generated coding frame, researchers should also examine (a) how well the coded data have addressed the research question, and (b) how well the coded material fits with and elaborates on the data set. Again, since coding in qualitative content analysis may be contextual and may draw on latent content, the creation of a transparent "map" to show readers how the codes were deductively created and applied is important. Sufficient raw data must be provided to the reader to illustrate in depth how coding was completed (Drisko, 2013b).

Combined Deductive and Inductive Coding

One limitation of deductive coding is that texts or newly collected data may contain important ideas or perspectives that were not previously identified in the conceptual and research literature. Researchers often discover points of view that arise from the comments of research participants. Still, the concepts and findings identified in the earlier literature may augment and help guide inductive qualitative content analyses in useful ways. Even where the literature is partial or does not include populations or topics of relevance to the current research question, the available literature may be conceptually useful. To make the best of both

worlds, researches may use combinations of deductive and indicative coding in qualitative content analysis.

Employing a combined deductive–inductive coding plan requires that the researcher clearly explicate the sources of each kind of coding. How each category is developed and refined must be made transparent to the reader and illustrated with examples from the analysis. Steps used to ensure reliability and validity or trustworthiness and credibility must be clearly explained to the reader (Drisko, 2013b).

Validity and Reliability in Qualitative Content Analysis Coding

Much of the qualitative content analysis literature uses traditional, quantitative terminology to describe validity and reliability in coding. Consistency and agreement among coders are sought. For example, Mayring (2000) describes using the Cohen's kappa statistic. He states that a value of greater than .70 should be used to establish adequacy in inter-rater reliability. Coded text segments should also reflect the meaning of the categories to which the researchers assign them. Mayring (2000) also suggests triangulation as a useful technique to establish validity in qualitative content analysis. More recent qualitative concepts such as credibility, authenticity, and trustworthiness are not often found in this literature despite its qualitative orientation.

Schreier (2012, p. 16) argues that reliability is emphasized over validity in basic content analysis, while validity is emphasized in qualitative content analysis. This appears to be an exaggeration, as both validity and reliability (or their qualitative variants) should both be key factors in establishing rigor of any content analysis. The difference in emphasis may reflect the challenge of interpretive coding. In qualitative content analysis, a team of researchers must agree that content reflecting a category is present even when it is latent or implicit. The team serves as a set of peer reviewers of the quality and consistency of coding. Use of annotations and memos also helps with identifying and tracking questions and with areas lacking clarity. The team must agree that applying the code is valid, as is consistently applying the same code to varied but relevant content. In addition, the coded categories must be credible, authentic, and persuasive to readers of a qualitative content analysis.

To ensure reliability, pairs or teams of researchers often code the same textual material and compare their results. As in basic content

analysis, discussion of the differences will initially serve to both identify areas of agreement and clarify differences in interpreting a segment of data. Initial training of research teams will improve coding consistency (reliability) and will improve the validity of coding. Mayring (2000) does not specifically mention such training, but his formative and summative reviews of the coded categories may serve similar functions.

Schreier (2012) suggests that triangulation with other data sources provides another technique to appraise the validity of qualitative content analyses. Indeed, George (1959a) reported that documents found after the end of World War II provided data that supported earlier interpretations of Nazi propaganda. The challenge to this method of establishing validity is that other sources of data are not always available or obvious. Member checks (reviewing data and researcher interpretations directly with the original research participants or the creators of texts under study) may not be possible when secondary data are used in content analysis.

Traditional methods of assessing validity and reliability may have limitations when used in qualitative content analysis. Chan et al. (2012) do not mention validity or reliability at all in their article. The authors do, however, identify several steps they took to ensure the trustworthiness of the data:

> Initially, multiple readings and open coding were conducted on all complete interview transcripts by three researchers; written memos on filial attitudes and behaviors on dignity were created, while codes were created to reflect the central characteristics of different narrative patterns. Second, [additional] coding was conducted to develop and refine possible categories of filial attitudes and behaviors, while text files containing illustrative and descriptive quotes supplementing the emergent themes were also created. Finally, three researchers independently reviewed and defined the emergent themes and presented to one another for confirmation; once consensus was reached, operational definitions were created. (p. 282)

The three researchers who agreed on the coding framework discussed and constantly compared how it addressed potential deviant cases during regular meetings. Such techniques may be viewed as promoting credibility and trustworthiness. Further clarification of how qualitative

techniques ensure credibility and trustworthiness could strengthen the literature on qualitative content analysis methods.

DATA ANALYSIS IN QUALITATIVE CONTENT ANALYSIS

As a primarily descriptive research method, the process of coding encompasses a significant part of analysis in qualitative content analysis. Schreier (2014a) states that the main analysis is complete once the coding of the categories is finalized. She describes the final step of data analysis in qualitative content analysis as preparing the data in a manner that clearly answers the research question. This may involve developing a format of presentation that shows how the subunits of coded data collectively address the overall research question. Such an analysis will center on the reporting of descriptive categories or themes, together with illustrations of the evidence that supports the categories. Detailed description is the typical purpose of these analytic methods. Yet researchers can also use other methods of data presentation and re-presentation to analyze and report qualitative content analyses.

In a more general sense, the analysis phase of qualitative content analysis involves reorganizing and reordering the coded categories to summarize the key content in the data. Researchers undertake this reorganization to fully address the research question and reveal content of interest and importance to readers. There are several techniques for summarizing study data and organizing its presentation to readers (Krippendorff, 2013; Miles & Huberman, 1984).

Data Analysis and Presentation in Narrative Format

The most common form of presentation for qualitative content analysis studies is the use of a narrative format. In this form of analysis, the researchers identify core categories or themes and use these categories as section headings in the report. Each core theme is interpreted in a summary manner and illustrated using quotations that show how texts or participants portrayed their original ideas or views. This form of narrative analysis both clarifies how categories were developed and highlights categories that address the overall research question. The level

of interpretation provided by the researchers may vary from minimal to significant. That is, categories or themes may merely be summarized to highlight the content, or the reader may be shown how more contextualized interpretations were made using latent content. Such contextualization may be as simple as showing how sarcasm or other figures of speech influence the meaning of a quotation. More complex interpretations of meaning and/or context may show how distinct quotations are related and shape meaning-making.

Chan et al. (2012) use a narrative approach to data analysis and presentation. One main theme in their end-of-life caregiver study, reciprocity in contemporary filial piety, is described as follows:

> Being able to discuss and share needs and concerns between parents and adult children in end-of-life caregiving was of paramount importance for sustaining filial conviction and behaviors. Janet, a 40-year-old daughter who supported her 83-year-old ailing mother through institutional care, said, "It is very important for me to talk to my mother openly about my difficulties with the care of my own family, and that I would not be able to take care of her at home. I had a great deal of regret because I knew that she didn't want to live in a nursing home, but she told me that it was fine and I was already doing the best that I could . . . I felt somewhat relieved knowing that she understood my situation and that I wasn't abandoning her. (p. 285)

In this passage, the researchers introduce the analytic theme of reciprocity and use it to summarize the content of the participant's statement. In all, three such quotations are provided to the reader. The passages show the reader how the theme summarizes the more detailed content of each original statement. Subjective experiences are captured using the overarching category, reciprocal relationships. Interpretation is minimal, though used to highlight the theme. The overall purpose of the qualitative content analysis remains essentially descriptive.

Narrative forms of data analysis and presentation in qualitative content analysis can be very persuasive. They may, however, be used selectively in ways that are not obvious to the reader. Researchers must take great care to *show* the reader that such quotations or text passages are typical of the entire data set. Narrative presentations may hide the impact of limited or selective sampling. To ensure rigor, iterative

sampling must be undertaken to seek out potentially disconfirming participants or texts (Drisko, 1997, 2013b). Researchers should explicate such iterative efforts to the reader in the research report. Researchers should show the reader how extreme cases provide divergent or differently nuanced views on the research question. This both builds credibility or validity and helps the reader understand the applicability of study results and their limits. Similarly, presenting quotations or text passages that define the boundary conditions of a coded category or theme can help build credibility and point to views that do not fit with the bulk of the analysis. For example, a participant in the Chan et al. (2012) study might choose to follow the end-of-life wishes of his or her parent, maintaining a more traditional view of filial piety. The study shows readers one contemporary response to managing end-of-life caregiving but does not show that this is the most common or only way of understanding and managing this difficult situation. Researchers must be careful not to make overly sweeping claims based on small samples. Readers must always be critical readers of narrative analysis used in qualitative content analyses. Clear and thorough reporting shows the reader how the researchers sought to maintain rigor in their work.

Data Analysis and Presentation in Matrix Format

Comparison Tables

Miles and Huberman (1984; Miles, Huberman & Saldaña, 2014) note that comparison and contrast are useful methods of qualitative data analysis and display. When researchers use qualitative content analysis to address a comparative research question, charts and matrices may be useful methods of data analysis and presentation. These matrix displays may be used to compare texts or participants' responses within a single site or across sites in a tabular format. They may also be used to compare different texts or different sites examined in a single study. Miles and Huberman (1994, p. 79) state that matrix displays have several advantages over narrative presentations. Matrix displays (1) are concise rather than dispersed across several pages, (2) simultaneously present large amounts of data rather than presenting it sequentially, and (3) clearly order the data display. They are useful as a step in data analysis as well as for use in the final research report.

Flow Charts

Miles and Huberman (1984) note that flow charts describing complex processes can be another useful analytic and reporting technique. If the research question guiding a qualitative content analysis centers on examination of processes or events unfolding over time, a flow chart can clearly summarize key steps in such processes over time. Requisite conditions, decision points, and alternative outcomes may all be presented in a summary manner.

Matrix charts can also be used to show the effects of varying contexts. Different views or meanings that are reported or found in texts can be summarized in a context matrix. Such charts show how contexts influence meaning-making and action in a clear, descriptive fashion.

To date, the social work literature includes only a few matrix analyses and presentations of study data. These formats fit well with the page-length restrictions of most journal articles and can be a valuable analytic and presentation technique.

An Example of a Flow Chart and a Conceptual Diagram

Maschi, Baer, and Turner (2011) examined how social justice was integrated with clinical social work in published articles. Both "clinical social work" and "social justice" are widely used concepts of great importance to professional social work. Both terms are also difficult to delineate and are rarely defined fully in publications. The authors note that many earlier references to social justice and clinical social work are polemical, so a broader review of how these concepts were used in publications would be a valuable contribution to knowledge.

Drawing on a search of 59 online databases, a sample of 38 social work articles published between 1998 and 2009 that meet criteria were located. Maschi et al. found that only four articles in the sample included definitions of clinical social work, and only nine included definitions of social justice. Yet article authors identified both direct and indirect pathways through which social justice and clinical social work were integrated. These included the intersection of the psychological and sociopolitical environments, the use of integrative theories, and the use of specific strategies and practices.

To show readers how these publications portrayed the integration of clinical social work and social justice, Maschi et al. (2011) used both a flow chart and a conceptual diagram (see Figures 4.1 and 4.2). The
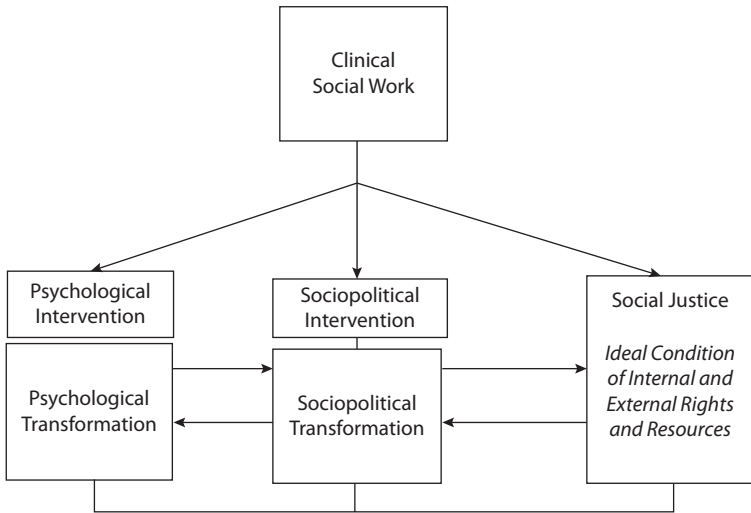
Figure 4.1. Flow chart describing direct and indirect integrative pathways. From Maschi, Bare, and Turner (2011, p. 238).

flow chart shows how the three pathways flow as distinct elements and as a whole. The researchers emphasized the interaction of the elements, effectively illustrating the complexity of the integration of clinical social work and social justice. All three key integrative pathways are summarized along with their interactions.

The conceptual diagram provides still more detail and scope (see Figure 4.2). The researchers show both the overarching context of clinical social work practice, including values and ethics, as influencing the social worker and the client in many ways. The conceptual diagram provides a larger perspective and more detail on specific interactions simultaneously. The researchers efficiently describe and summarize the multiple pathways of interaction for the reader.

Yang and Chen (2006) explored Chinese children's views on the meaning of death, using a qualitative content analysis. The 204 participants, ranging from fourth- to ninth-grade students at one high school in Taiwan, were each asked to complete a paragraph-length narrative on their views of death. The study sought to provide evidence on age-related variation in views on death, together with how life experiences of death shaped the narratives. The study drew on Piaget's developmental
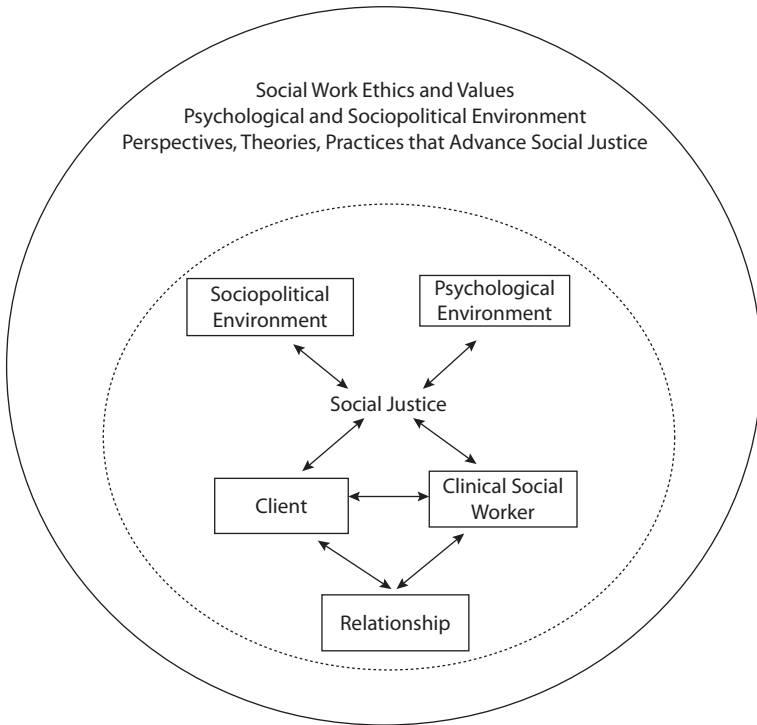
Figure 4.2. A conceptual diagram. From Maschi, Bare, and Turner (2011, p. 239).

framework and a theory of children's views of death that was developed by Neimeyer, Fontana, and Gold (1983) and Holcomb, Neimeyer, and Moore (1993). The participants were asked to write narratives using several prompts stated as sentence stems. The prompts included the following: "I think death is . . ."; "Reasons for death are . . ."; and "When I think about death, I will worry about or be afraid of . . ." (p. 221). The researchers also collected demographic data about family composition and death experiences.

Given the large data set and the prior conceptualization, a matrix of tabular presentation of data was used to summarize and describe the study findings. The matrix approach also ties short segments of raw data with each summary concept, helping readers understand the data that supported each key concept (see Table 4.1). The matrix identifies

Table 4.1. Matrix Presentation of Chinese Children's Views about Death (Partial)*

Category	Definition and examples	n (%)
1. Internal Causality	Some children attribute death to internal causality. Death may result from aging, sickness, and physical degeneration. • Death is caused by sickness, heart failure, or aging. • Death is caused by physical dysfunction.	153 (75%)
2. Negative Emotional State	When talking about death, some children show negative emotional states toward death, such as frustration, oppressiveness, grief, and sadness. • When I think about death, I am frustrated and down. It is painful and I'm scared. • When I think about death, I feel oppressed and I'm speechless.	142 (69.6%)
16. High Suffering	Some children mentioned that the process of death is painful or that death itself is the source of pain. • Death is painful. People die from diseases or in accidents. There are few chances to die naturally. Most people die in pain.	13 (6.37%)
17. Positive Valuation	Some children give a positive and active judgment toward death. They think that death is good and valuable and do not see it as terrible or scary. Such children thus can face death. • If there's heaven and hell, then I do not consider death a bad thing; I can meet my dead family members or friends there. • Death looks like lying down forever, just like going to sleep, and so it is not terrible. • Everyone will die, it is serious and dignified.	12 (5.88%)

*From Yang and Chen (2006, pp. 223–227).

each descriptive category, provides quotes from the participants, and provides a frequency statistic. In this way, researchers can convey to the reader information describing large data sets while including complex and subtly different raw data (Miles & Huberman, 1984; Miles et al., 2014).

Schreier (2012) states that using frequencies to report qualitative content analyses is helpful as these statistics show specifically how many participants or texts gave voice to each category or concept. This method is useful to orient the reader to findings from a large data set and to show the relative prevalence of each category. Of course, frequencies from small samples may not be transferable to other small samples nor reflect results that might be obtained from larger samples. Qualitative content analysts should clearly identify the limitations related to their samples when using frequency summaries. Using descriptively frequency statistics can be a valuable part of qualitative content analyses. Their limitation is that relative frequencies based on even 200 participants may not be representative of other, different samples or of the entire population. Yang and Chen (2006) sampled from one university-affiliated high school in Taiwan. This quite reasonable but a nonprobability sample does not allow quantitative generalization to all Chinese children of similar ages. The results, show, however, how prior concepts may be applied to these children and sensitize readers to questions to consider in their own settings. Frequencies should be used with caution in qualitative content analysis to avoid inappropriate overgeneralization from nonprobability samples.

Many analytic and data presentation techniques can be used in qualitative content analysis. Researchers can use both narrative and many different visual methods of data display to inform their readers. Visual techniques of data presentation can effectively summarize large and complex data sets and can illustrate complex interactions among data and concepts.

RESEARCHER SELF-REFLECTION AND REFLEXIVITY IN QUALITATIVE CONTENT ANALYSIS

Since the researcher is the instrument of coding and other analytic decisions in qualitative content analysis, self-reflection and reflexivity are important elements of the research process. Reflexivity in qualitative research addresses researcher engagement in explicit self-aware reviews of several kinds. These may range from individual self-awareness and self-reflection to intersubjective or collaborative processes to critical analyses. Finlay (2002) identifies five variants of reflexivity: (1) introspection, (2) intersubjective reflection, (3) mutual collaboration, (4) social critique, and (5) discursive deconstruction.

The purpose of self-reflection and reflexivity is to identify personal biases or viewpoints and larger social issues that may affect conceptual, methodological, and analytic decisions made during the project. Identifying such bias allows alterations in methods to address them or to account for them in other ways. It also informs the reader of areas in which the researcher's choices may warrant careful review. Finlay (2002, p. 215) notes: "The challenge for researchers using introspection is to use personal revelation not as an end in itself but as a springboard for interpretations and more general insight." That is, self-reflection is useful when it aids achievement of the overall research objectives. Such personal revelations may address intersubjective issues or more macro-level social critique.

There are no standards for researcher self-awareness or reflexivity in the current qualitative content analysis literature. This is in clear contrast to growing emphasis on both issues in qualitative research more generally. That said, without a standard or expectation for such reflection, it is typically lacking in qualitative content analysis reports.

For example, Maschi et al. (2011) discuss several potential limitations to their study but do not address reflexivity. Their identification of the limitations of their sample and cautions against overgeneralizations are clear and sound. They also note, with solid self-awareness, that other researchers might define different categories and that inter-rater reliability might be different with another team of researchers or data set. Wider reflexivity about power and context was not addressed.

Similarly, Chan et al. (2012, p. 293) state:

Despite their qualitative nature, the findings shed new light on the experience of family caregiving from the perspectives of adult-children caregivers, and carry important policy and clinical implications. In essence, the notion of filial piety has evolved in the contemporary context and now emphasizes reciprocal relationships, mutual support, and compassionate duty. However, the longstanding filial caregiving practice of task fulfillment has persisted, where the inability to provide practical and pragmatic care to parents at the end of life has caused shame and guilt among adult-children caregivers. Moreover, caregivers' sense of powerlessness to emotionally connect with their ailing parents has resulted in much regret and sorrow. These findings pinpoint the imperative for greater government assistance in home care support,

as well as the critical need for a family-driven dignity-enhancing intervention in palliative social work.

These findings shed new light on filial piety in Chinese parental caregiving, but they may risk overgeneralization from a sample of 15 participants (3 male, 12 female). There is no caution to readers that these results should be viewed as pointing out new possibilities to be tested for applicability in other settings and with other caregivers. Chan et al. argue abductively for greater government assistance to support these caregivers, but they do not reflexively question the power structures in which they are embedded.

Most qualitative content analyses (like most interpretive content analyses) are "realist tales" (Van Maanen, 1983) in which the researcher does not engage in much formal self-reflection or reflexivity. Instead, interpretive content analyses emphasize unproblematized (more or less) objective "facts." Larger social contexts and power structures are rarely addressed as shaping study results, even speculatively. This perspective is consistent with positivist or realist epistemologies, but not with a constructivist epistemology or critical theory. Considerable additional work is needed to develop clarity regarding how choices of epistemology and techniques of self-reflection and reflexivity are applied in qualitative content analysis.

CHAPTER SUMMARY

Qualitative content analysis is a recent approach to content analysis that has strong potential for social work research. The new approach is still developing, and the literature is sometimes contradictory on both general research methods and specific techniques. Qualitative content analysis may be framed inductively, deductively, or using a combination of both approaches. It is a flexible research method (Anastas, 1999). Qualitative content analysis may use either newly collected data, existing texts and materials, or a combination of both. It may be used in exploratory, descriptive, comparative, or explanatory research designs, though its primary use is descriptive.

Many techniques of coding data are now discussed in the qualitative content analysis literature, though further elaboration and clarification

of these techniques are needed. Although most analyses use narrative data analysis and presentation techniques, other methods are also found in the current literature. These include flow charts, conceptual diagrams, and tabular charts summarizing study analyses. Additional examination of the role of epistemology and of sampling methods is needed to ensure rigor in qualitative content analysis. The iterative cycle of sampling, data collection, and data analysis can be a valuable part of strengthening qualitative content analysis methods. Steps toward including potentially disconfirming data will also improve the rigor of qualitative content analyses. Further exploration of the appropriate role of abductive claims made using qualitative content analysis results is also warranted.

Qualitative content analysis appears to be very similar to some other models of qualitative research. These include Boyatzis' (1998) thematic analysis and Hill's (2011) consensual qualitative research. Qualitative content analysis is also quite different from some other qualitative research methods. The coding process of qualitative content analysis may initially be similar to the coding processes developed for grounded theory, but description rather than development of mid-level theory is the research objective (Glaser & Strauss, 1967). Qualitative content analyses typically use a single-stage method of data analysis, while grounded theory uses a three-stage, iterative method. In contrast to discourse analysis, qualitative content analysis focuses more on content than on discourse process, may be based on positivist/realist epistemologies rather than solely on a constructivist epistemology, and is much less likely to include critical analyses (Schreier, 2012). In contrast to semiotic analysis, qualitative content analysis is more descriptive and is much less likely to include critical interrogation of the data (Schreier, 2012). Researchers need to more clearly identify the unique aspects of qualitative content analysis.