Qualitative Content Analysis

6 Articles on the Definition & Quality Design Considerations

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The contents of this compilation include a selection of 6 articles appearing in *Research Design Review* from 2014 to 2022 concerning qualitative content analysis. Excerpts and links may be used, provided that the proper citation is given.

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Qualitative Content Analysis: Defined

The following is a modified excerpt from *Applied Qualitative Research Design: A Total Quality Framework Approach* (Roller & Lavrakas, 2015, pp. 231-232).

The qualitative approach to content analysis traces its roots to the mid-20th century when qualitative researchers began to modify the approaches that had been used by quantitative content analysis researchers. The purpose was to enrich what qualitative researchers believed was an overly sterile approach that focused preponderantly on manifest (surface) content and largely missed the richer latent content, consequently missing much of the meaning underlying the text or other form of content being studied. The “content” in qualitative content analysis often originates from other qualitative methods (e.g., transcripts from in-depth interviews, group discussions, and ethnographic field notes). With this point in mind, qualitative content analysis researchers devised and advocated for a methodical process similar to quantitative content analysis but with a greater emphasis on subjective interpretations of the meaning in qualitative content so as to identify relevant themes and patterns (Zhang & Wildemuth, 2009; Hsieh & Shannon, 2005).

There is no shortage of definitions associated with the content analysis method. In fact, there appear to be no two definitions that are identical. Two researchers, Berg and Lune (2017), draw on several sources to define content analysis as “a careful, detailed, systematic examination and interpretation of a particular body of material in an effort to identify patterns, themes, biases, and meanings” (p. 182). Similarly, Krippendorff (2019) states that “content analysis is a research technique for making replicable and valid inferences from text (or other meaningful matter) to the contexts of their use” (p. 24). Information researchers Zhang and Wildemuth (2009) take the latent aspect one step further in their discussion of qualitative content analysis with the assertion that the aim is “to understand social reality in a subjective but scientific manner” (p. 308).

Regardless of the definition, there are six essential components to the content analysis method in qualitative research. Qualitative content analysis:
1. Encompasses all relevant qualitative data sources, including text, images, video, audio, graphics, and symbols.
2. Is systematic, process-driven method.
3. Draws meaningful interpretations or inferences from the data based on both manifest and latent content.
4. Is contextual, that is, relies on the context within which the information is extracted to give meaning to the data.
5. Reduces a unit of qualitative data to a manageable level while maintaining the critical content.
6. Identifies patterns and themes in the data that support or refute existing hypotheses or reveal new hypotheses.

Looking at these elements of the content analysis method, Roller and Lavrakas (2015) derive the definition of qualitative content analysis as, the systematic reduction or “condensation” (Graneheim & Lundman, 2004) of content, analyzed with special attention to the context in which it was created, to identify themes and extract meaningful interpretations of the data. Qualitative content analysis can be used as a secondary or primary method.


A unique attribute of qualitative content analysis is the focus on a continual process of revising and developing meanings in the data based on new discoveries. Unlike quantitative content analysts who set their coding scheme early in the research process — typically modifying it only slightly or not at all during data collection — qualitative researchers methodically and frequently revisit the content they are studying to better understand each relevant piece as well as its relationship to the entire context from which it was chosen (sampled), thereby modifying how and what they are coding throughout the data collection period. In this way, and as Krippendorff (2013) points out, qualitative content analysis puts the analyst in a hermeneutic circle\(^1\) whereby interpretations are reformulated based on new insights related to, for example, a larger context.

This more flexible, less rigid, approach to content analysis also embraces the notion of multiple meanings derived from multiple sources. A case in point is triangulation, which is used in qualitative analysis to verify the analyst’s interpretations by considering alternative points of view or analyzing deviant cases. It is this more far-reaching consideration of the data — along with the added support of the research participants’ verbatim comments that are typically included in the final research document — that is indicative of the unique qualities of the qualitative approach.

Indeed, it is the inductive strategy in search of latent content, the use of context, the back-and-forth flexibility throughout the analytical process, and the continual questioning of preliminary interpretations that set qualitative content analysis apart from the quantitative method.

*Adapted from Roller & Lavrakas, 2015, p. 233-234.*
Krippendorff (2013) uses the concept of the “hermeneutic circle” in content analysis to mean that “text is interpreted relative to an imagined context, and these interpretations in turn reconstruct the context for further examination of the same or subsequently available text” (p. 259).


Secondary & Primary Qualitative Content Analysis: Distinguishing Between the Two Methods

The following is a modified excerpt from *Applied Qualitative Research Design: A Total Quality Framework Approach* (Roller & Lavrakas, 2015, pp. 241-244).

The definition and use of the content analysis method in qualitative research varies depending on the particular type of qualitative content analysis (QCA) being conducted. The most common QCA method is utilized when it plays a supportive analytical role in combination with other qualitative methods, such as in-depth interviews (IDIs) and focus group discussions, i.e., when content analysis is being used as a *secondary* method. The other less common QCA method is used when the source of content is an existing, naturally occurring repository of information (such as historical documents, media content, and diaries), i.e., when content analysis is being used as a *primary* method.

Secondary Method

A systematic application of QCA as a secondary method* has been conducted across a variety of disciplines. Health care researchers in particular have used content analysis in conjunction with other qualitative methods to investigate a broad range of topics. For example, Söderberg and Lundman (2001) applied the content analysis method to analyze the results from 25 unstructured IDIs conducted with women inflicted with fibromyalgia, from which they isolated five areas in these women’s lives impacted by the onset of this condition. In a similar approach, Berg and Hansson (2000) examined the lived experiences of 13 nurses working in dementia care at a psychogeriatric clinic who received clinical group supervision and individually planned nursing care. Berg and Hansson conducted unstructured, open-ended IDIs with each nurse and executed a content analysis that revealed two principal and five subordinate themes indicating supportive needs at the personal and professional level. Kyngäs (2004) studied the support network among 40...
teenagers suffering from a chronic disease, such as asthma or epilepsy, by way of semi-structured IDIs. Content analysis in this instance showed six distinct social network categories for these adolescents, i.e., parents, peers, health care providers, school, technology, and pets.

**Primary Method**

The primary QCA method – which focuses on naturally occurring data – has also been used across a number of disciplines. These data sources are often textual in nature (i.e., written accounts of some kind, see below); however, this is not always the case. For instance, television content has been the focal point for public health researchers examining direct-to-consumer prescription drug commercials (Kaphingst, DeJong, Rudd, & Daltroy, 2004) as well as sociologists such as David Altheide (1987) who utilized content analysis to study television news coverage of the Iranian hostage crisis. The analysis of patients’ “scribbles” from art psychotherapy sessions (Egberg-Thyme, Wiberg, Lundman, & Graneheim, 2013) as well as racism and the depiction of interracial relationships in U.S.-made films (Beeman, 2007) are other examples of using QCA as a primary method where the focus is on non-textual content.

Content analysis as a primary method to explore textual data has been used in: (a) sociological research to look at gender biases reflected in the Boy Scouts’ and Girl Scouts’ handbooks (Denny, 2011); (b) mass communication to study the portrayal of female immigrants in the Israeli media (Lemish, 2000); (c) sports marketing to investigate the social outreach programs among the four major professional leagues via a content analysis of their respective community website pages (Pharr & Lough, 2012); and (d) corporate management, including studies that analyze the content of corporate mission statements to understand “the messages communicated to organizational stakeholders” (Morris, 1994, p. 908).

Primary QCA is also used to study online content, including the examination of websites (such as Pharr & Lough, 2012, mentioned above) and the numerous ways people interact on social media. Once again, researchers in the health care industry have been particularly active using QCA to study social and other web-based phenomena. As an example, Nordfeldt, Ängarne-Lindberg, and Berterö (2012) used the content analysis method to examine essays written by 18 diabetes health-care professionals concerning their experiences using a web portal designed for young diabetes type 1 patients and their significant others. The capabilities and use of social media, however, present qualitative researchers with new challenges. Comments – made on blogs, networking sites, user groups, and content-sharing sites – and the use of hyperlinks are just two examples of how social media content is rarely isolated and, to the contrary, represent a highly integrated form of
communication where finding themes or patterns from the multiplicity of interactions may present an extremely daunting task for the researcher. For this reason, information systems researchers such as Herring (2010) and Parker, Saundage, and Lee (2011) advocate a different, non-traditional way of thinking about the content analysis method in terms of developing units of analyses, categories, and patterns based on the realities of the interactive, linked world of online social media.

* Not unlike the steps discussed in this 2015 Research Design Review article.


A Quality Approach to Qualitative Content Analysis

The following includes excerpts from Section 1 and Section 4 in “A Quality Approach to Qualitative Content Analysis: Similarities and Differences Compared to Other Qualitative Methods” Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 20(3), Art. 31. The Table of Contents for the entire FQS special issue on qualitative content analysis can be found here.

1. Introduction

Scholarly discourse about what it means to collect and analyze qualitative data is a dynamic discussion in the qualitative community. At the center of this discourse is the shared understanding that qualitative research involves the examination of nuanced connections, along with the social and contextual dimensions, that give meaning to qualitative data. Qualitative researchers strive to discover these nuanced connections and contextual dimensions with all methods, and most assuredly with qualitative content analysis (QCA) (ELO & KYNGÄS, 2008; GRANEHEIM & LUNDMAN, 2004; HSIEH & SHANNON, 2005; LATTER, YERRELL, RYCROFT-MALONE & SHAW, 2000; SCHREIER, 2012; TOWNSEND, AMARSI, BACKMAN, COX & LI, 2011). Yet, in every instance, qualitative researchers are presented with the challenge of conceptualizing and implementing research designs that result in rich contextual data, while also incorporating principles of quality research to maximize the discovery of valid interpretations that lead to the ultimate usefulness (i.e., the “so what?”) of their research.

In this article I discuss what makes QCA similar to and different from other qualitative research methods from the standpoint of a quality approach. In order to establish the basis from which quality concerns can be discussed, I begin with defining the QCA method (Section 2) and, in so doing, identifying the fundamental similarities and differences between QCA and other methods (Section 3) from the perspective of the ten unique attributes of qualitative research (ROLLER & LAVRAKAS, 2015). With this as a foundation, I continue with a brief contextual discussion of a quality approach to qualitative research and the QCA method.
A quality approach specific to the QCA method—as opposed to a quality orientation within the quantitative paradigm (KRIPPENDORFF, 2013)—has been put forth by several researchers. For instance, GRANEHEIM and LUNDMAN (2004) discuss the trustworthiness of QCA research, leaning on the familiar concepts of credibility, dependability, and transferability made popular by LINCOLN and GUBA (1985). Similarly, ZHANG and WILDEMUTH (2009) discuss the trustworthiness of the QCA method as defined by LINCOLN and GUBA (1985) and include the fourth criterion of confirmability. And, as a final example of how researchers have employed quality standards to the QCA method, FORMAN and DAMSCHRODER (2008) focus on issues of credibility, validity, and reliability throughout a QCA study, e.g., how memos add credibility to the research, how team coding establishes content validity as well as coding reliability, and how the examination and reporting of “negative cases” instills credibility in the findings.

With a few exceptions, a discussion of a quality approach to the QCA method as a way to think about and incorporate quality principles at each phase of the research process has been lacking in the literature. ELO et al. (2014), for example, offer a checklist to improve the trustworthiness of a QCA study at each of three phases, i.e., the preparation, organization, and reporting phases. Also, in his discussion of the internal quality standards associated with qualitative text analysis, KUCKARTZ (2014) outlines essential questions covering a broad scope of the research process, including the selection of method, coding, category development, consideration of outliers (i.e., “any unusual or abnormal cases,” p.154), and justification of the conclusions.

By considering quality standards at each step in the research design, the researcher acknowledges that a quality qualitative research design is only “as strong as its weakest link”; meaning, for example, that a deliberate quality approach to data collection and analysis yet a failure to write a quality transparent final document,
effectively masks the integrity of the research and undermines its ultimate value. A holistic quality-centric approach to qualitative research design and, specifically to the QCA method, is my focus in this article. This approach—the total quality framework (ROLLER & LAVRAKAS, 2015)—is introduced and discussed in the remaining sections, with particular attention paid to the similarities and differences between QCA and other qualitative methods when applying this framework.


Elo, Satu; Kääriäinen, Maria; Kanste, Outi; Pölkki, Tarja; Utriainen, Kati & Kyngäs, Helvi (2014). Qualitative content analysis: A focus on trustworthiness. SAGE Open, 4(1), 1-10, https://doi.org/10.1177%2F2158244014522633 [Date of Access: May 7, 2019].


Qualitative Content Analysis: The Challenge of Inference

Back in April 2013, a post in RDR talked about the “daunting job of conducting a content analysis that reveals how people think [the “stream of consciousness”] while at the same time answers the research question and takes the sponsoring client to the next step.” The article outlines the basic steps in a content analysis, including the analysis and interpretation phases of the process. Making interpretations from a content analysis are tricky things, esp., when conducting a “primary content analysis” when the content being analyzed is derived from non-research-related, pre-existing sources such as newspapers, blog posts, Hollywood films, YouTube videos, television broadcasts, and the like. The issue here is the “trap” content analysts can fall into by (a) thinking there are causal relationships in the data when there are not, and/or (b) trying to build a story in the shape of their interpretations when the story (based on the data) has little merit. In this way, an overabundance of unsubstantiated subjectivity can creep into the qualitative content analysis method.

These traps, related to causality and storytelling, are fairly easy to fall into unless a systematic and conscientious approach is taken in the analysis and interpretation phases. In particular, there are three characteristics of textual and non-textual material used in primary qualitative content analysis that may stymie the analyst’s ability to draw far-reaching interpretations:

1. **The original act of constructing the content material (e.g., the document, video, or photograph) may have altered the meaning of the subject matter.** For example, in a study examining a series of blog posts regarding Detroit’s inner-city crime, the researcher may be unable to discern the realities of crime in Detroit because, by the mere act of writing about it, the writer has (deliberately or not) reformulated its true nature and given the reader a biased account. Therefore, what the researcher may be studying in this example is the writer’s rendition of inner-city crime in Detroit, not the actual nature of the crime “scene” itself.
2. **The instability or unpredictability of the content.** For example, politicians may routinely shift their communication “sound bites” depending on the audience, the speaking environment, or the “political mood” in the country at any one moment in time. In these cases of inconsistencies in the content, the content being analyzed may have little or nothing to do with the natural variation in the topics of interest but instead are due to the whims of the creator.

3. **The content is often a product of a group of people rather than one individual.** An example of this has to do with the documents created within corporate or governmental organizations which do not reflect the thinking of any one person but rather are a product of a team or group of people. Examples can be found in a variety of source material, especially in video or films and broadcast media where multi-authored creations may obscure true intentions and thereby challenge the researcher’s ability to infer meaningful connections in the content. Fields (1988), for example, conducted a qualitative content analysis of television news, observing that the coverage of “right-wing Christian fundamentalists” usually showed reporters standing near churches, an American flag, or the White House, and came to this conclusion: “The juxtaposition of these symbols conveyed the message that fundamentalists were seeking political power” (p. 190). This interpretation might have been more credible if these newscasts were the creation of a single individual who made all the on-air decisions and whose position on the Christian fundamentalists was explicitly disclosed. But, as a product of many people in broadcast news with varying agendas, alternative rationales for the backdrop exist, e.g., churches might be considered an appropriate setting to report on a Christian group, or the American flag might be deemed a suitable prop given that Christian fundamentalists are an American phenomenon.


Image captured from [http://quickgamer.net/games/criminal-case/cases/scenes-4-to-6/](http://quickgamer.net/games/criminal-case/cases/scenes-4-to-6/).
Kuperberg and Stone (2008) present a case study where content analysis was used as the primary research method. It is an example of how many of the Total Quality Framework (TQF) concepts can be applied — not only to the in-depth interview, focus group, observation, and case centered methods, discussed elsewhere in Research Design Review, but — to qualitative content analysis. The discussion below spotlights aspects of this study relevant to one of the four TQF components, Analyzability.

Purpose & Scope
The primary purpose of this primary qualitative content analysis study was to extend the existing literature on the portrayal of women’s roles in print media by examining the imagery and themes depicted of heterosexual college-educated women who leave the workforce to devote themselves to being stay-at-home mothers (a phenomenon referred to as “opting out”) across a wide, diverse range of print publications. More specifically, this research set out to investigate two areas of media coverage: the content (e.g., the women who are portrayed in the media and how they are described) and the context (e.g., the types of media and articles).

This study examined a 16-year period from 1988 to 2003. This 16-year period was chosen because 1988 was the earliest date on which the researchers had access to a searchable database for sampling, and 2003 was the year that the term “opting out” (referring to women leaving the workforce to become full-time mothers) became popular. The researchers identified 51 articles from 30 publications that represented a wide diversity of large-circulation print media. The researchers acknowledged that the sample “underrepresents articles appearing in small-town outlets” (p. 502).

Analyzezability
There are two aspects of the TQF Analyzability component — processing and verification. In terms of processing, the content data obtained by Kuperberg and Stone from coding revealed three primary patterns or themes in the depiction of women who opt out: “family first, child-centric”; “the mommy elite”; and “making choices.” The researchers discuss these themes at some length and support their findings by way of research literature and other references. In some instances, they
report that their findings were in contrast to the literature (which presented an opportunity for future research in this area). Their final interpretation of the data includes their overall assertion that print media depict “traditional images of heterosexual women” (p. 510).

Important to the integrity of the analysis process, the researchers absorbed themselves in the sampled articles and, in doing so, identified inconsistencies in the research outcomes. For example, a careful reading of the articles revealed that many of the women depicted as stay-at-home mothers were actually employed in some form of paid work from home. The researchers also enriched the discussion of their findings by giving the reader some context relevant to the publications and articles. For example, they revealed that 45 of the 51 articles were from general interest newspapers or magazines, a fact that supports their research objective of analyzing print media that reach large, diverse audiences.

In terms of verification, the researchers performed a version of deviant case analysis in which they investigated contrary evidence to the assertion made by many articles that there is a growing trend in the proportion of women opting out. Citing research studies from the literature as well as actual trend data, the researchers stated that the articles’ claim that women were increasingly opting out had weak support.