


# Writing Usable Qualitative Health Research Findings

Qualitative Health Research  
22(10) 1404–1413  
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sagepub.com/journalsPermissions.nav  
DOI: 10.1177/1049732312450368  
http://qhr.sagepub.com  


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## Abstract

Scholars in diverse health-related disciplines and specialty fields of practice routinely promote qualitative research as an essential component of intervention and implementation programs of research and of a comprehensive evidence base for practice. Remarkably little attention, however, has been paid to the most important element of qualitative studies—the findings in reports of those studies—and specifically to enhancing the accessibility and utilization value of these findings for diverse audiences of users. The findings in reports of qualitative health research are too often difficult to understand and even to find owing to the way they are presented. A basic strategy for enhancing the presentation of these findings is to translate them into thematic statements, which can then in turn be translated into the language of intervention and implementation. Writers of qualitative health research reports might consider these strategies better to showcase the significance and actionability of findings to a wider audience.

## Keywords

knowledge transfer; knowledge utilization; research, dissemination and utilization; research, qualitative

A persistent lament in the health sciences literature is that research findings fail to have the demonstrable impact they should have on practice (Green, Ottoson, Garcia, & Hiatt, 2009; Mangione-Smith et al., 2007; McGlynn et al., 2003). Set against the evidence-based practice movement, turn to implementation science, and surge of interest in the dissemination and translation of research findings, this refrain has become even more urgent over the past decade and of special concern in the qualitative health research community (Sandelowski, 2004). The contribution of qualitative research to expanding the evidence base for practice has increasingly been lauded in diverse health-related disciplines and specialty fields of practice (e.g., Barbour, 2000; Bower & Scambler, 2007; Leys, 2003; McEwan, Espie, & Metcalfe, 2004; Ong & Richardson, 2006). Qualitative research is now promoted as essential to the development, testing, and implementation of interventions (Song, Sandelowski, & Happ, 2010) and in the systematic reviews integral to evidence-based practice (Pope, Mays, & Popay, 2007).

Despite all of the attention now given to qualitative research, remarkably little attention has been paid to arguably the most important element of qualitative studies, namely, the findings of those studies and specifically the presentation of these findings in the reports of those studies. A host of checklists for evaluating and reporting

qualitative studies has been advanced (e.g., Boeije, van Wesel, & Alisic, 2011; Tong, Sainsbury, & Craig, 2007), but, beyond the vague mandate that findings should be clear, writers of qualitative health research reports have received relatively little guidance on how to accomplish this clarity and even less on how to present findings that are usable.

In this article, we first review the challenges that the presentation of qualitative research findings distinctively presents to use, that is, to their comprehensibility, translatability, and actionability. We then propose strategies writers of research reports might consider for enhancing the accessibility and “utilization value” (Smaling, 2003, pp. 20-21) of their presentations of qualitative research findings for clinical practice and program implementation. We focus here on the presentation of research findings in the preferred experimental style of reporting the results of scientific inquiry (Bazerman, 1988) in peer-reviewed health sciences journals. The experimental

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report is characterized in part by defined “findings” or “results” sections. This form of “passive dissemination” (Keen & Todres, 2006, p. 9) is still the primary venue for disseminating research findings in the health-related disciplines and likely to remain so for the foreseeable future. Findings that have withstood the test of scientific peer review are those that the health sciences community at large considers to merit dissemination. The peer-reviewed journal article is thus deemed an essential first step in the transition of research findings to “active dissemination” (Keen & Todres, 2006, p. 9) in forms tailored to and directly engaging the needs of end users (Dearing & Kreuter, 2010; Mitton, Adair, McKenzie, Patten, & Wayne Perry, 2007; Wilson, Petticrew, Calnan, & Nazareth, 2010).

We define *qualitative research findings* as the informational content or thematic syntheses, grounded theories, phenomenologic descriptions, ethnographic or narrative/discourse descriptions or explanations, or other integrated and coherent interpretations of those aspects of the social world targeted for study that researchers produce from the analysis of data generated in or from interviews, observations, documents, and artifacts. We define *presentation* as the form authors of research reports choose to communicate the content of these findings. We draw here an admittedly artificial distinction between form and content in the hopes of communicating the importance of form in shaping content. This distinction is thematic throughout this article.

We do not address here nontraditional arts-based forms of dissemination such as poems, novels, short stories, dance, ethnographic and research-based theater, and other modes of dramatizing or performing data (Keen & Todres, 2006, 2007). These modes of dissemination require an arts and humanities, as opposed to science, skill set and aesthetic sensibility. Few health sciences journal venues will accept such alternative forms of presenting qualitative research. Indeed, preferring “plain text, plain speak, and profound conclusions over artistic forms of data presentation,” the editor and members of the editorial board of *Qualitative Health Research* decided not to accept such forms without compelling reasons provided by authors for doing so (Morse et al., 2009, p. 1036).

### Challenges the Presentation of Qualitative Research Findings Poses to Use

As presented in experimental reports of completed qualitative health research, qualitative research findings are too often difficult not only to understand but also to find. Reasons for this include authors mistaking heaped for thick description; confusing analysis with interpretation;

misusing quotes, incidents, and other data in efforts to support interpretations; inadequately differentiating between the findings researchers generated in their study and the findings generated in other studies to which researchers refer to place their own findings in context; and inadequately differentiating between participants’ and researchers’ perspectives or voices (Sandelowski & Barroso, 2002). Qualitative research findings are difficult to apprehend also when they are not rendered parsimoniously (Cutcliffe & Harder, 2009): when the desires for self-expression and artfulness trump expression that is comprehensible to others, and when simplified writing is mistaken for oversimplification of the complexity of the experiences, events, and the like targeted for study.

Contributing to the too-frequent lack of accessibility of qualitative research findings in health sciences journals is the default to the false dichotomy whereby scientific reports are viewed as representing complex phenomena in a dull, overly linear, and context-stripping manner and arts-based modes of dissemination, as better able to capture the complexity and multidimensionality of these phenomena in a manner that evokes emotion and provokes action (e.g., Caulley, 2008). There is nothing, however, about the conventional mode of science reporting that precludes capturing the complexity, or the multifactorial, multiplicative, and multivariable aspects, of the social world under study in words and visual displays that are informative, evocative, and provocative. Indeed, amendments to the experimental report of qualitative health research are now increasingly permitted in a wider array of health sciences journals (e.g., use of first-person active instead of third-person passive voice, references to other reports in the results section instead of confining such references to the discussion section, foreshadowing of results in the introduction instead of restricting results to the results section, more pages allotted, use of expressive and poetic language).

These amendments facilitate the communication of complexity and both a thinking and feeling understanding (van Manen, 1990) of the experiences and events under investigation. These amendments have always characterized social science journals publishing qualitative health research. For example, research reports in these journals might have no sections explicitly labeled as “findings” or “results,” but these sections will be discernible to readers as devoted to what the researchers found. Skilled readers will know how to read qualitative health research reports amended to accommodate the norms of different disciplinary venues and audiences.

The line drawn between science reporting and arts-based forms of dissemination also glosses the mandate in scientific inquiry to advance an explicit interpretation of the data generated in a study. Poets and playwrights do not have to tell their audiences what to make of their

poems and plays, but researchers in the health sciences are obliged to advance an interpretation of the data generated about the events, experiences, and the like they targeted for inquiry. Poems and plays cannot be summed up without violating the very essence of these forms, but health-related research studies are expected to yield discrete, extractable, and synthesizable results. Poets and playwrights have no practice mandate; that is, they have no obligation to improve the public health and well-being. As members of a practice discipline with a social mission, nurses, physicians, and other health professionals have this duty; if they present their inquiry efforts as qualitative health research, that means presenting actionable findings, or advancing an explicit interpretation of “practical import” (Morse et al., 2009, p. 1036) of the experiences targeted for study. This false dichotomy also glosses the fact that poems might be just as (or even more) complex both to write and read than conventional science reports and therefore require at least as much training to produce and comprehend.

Another challenge to the accessibility of qualitative findings is that they are by their very nature different from quantitative findings. Findings appearing in the results section of a report of a quantitative study are typically composed of the outcomes of the various statistical tests applied. For example, writers of such reports might state the scores generated from participants’ responses to a depression inventory and whether these scores were correlated with scores generated from responses to an anxiety inventory, or they might state whether one or more hypotheses were supported by the results of statistical tests. *Data* here refers to participant responses to each item on all of the inventories completed, and *data-based result* to the outcomes of statistical testing. Although the “interpretive gesture” is present even in the most quantitative of studies (Love, Pritchard, Maguire, McCarthy, & Paddock, 2005, p. 283; Sandelowski, Voils, & Knafl, 2009), much of the interpretive work that went into producing these results is deleted (Star, 1983).

Once researchers have decided, for instance, what measures to use, how to score them, and what statistical tests to run, the subjective nature of these decisions is pushed to the background out of view. Indeed, this deletion of the interpretive work of quantitative research is in part the basis for the polemical simplification of quantitative research as “objective” and qualitative research as “subjective.” The experimental report was designed to maintain this putative distinction between objective results (in the results section) and subjective interpretations (in the discussion section). Quantitative results are presented in reports as objective data-based results, implying that anyone running those tests in the same way on the same data set would get the same outcomes. Researchers’ interpretations of these statistical results—for example,

their speculations about why those results were obtained and what they might mean—are confined to the discussion section in the experimental research report.

In contrast, qualitative findings are themselves composed of researchers’ interpretations of the interview, observation, and/or other data generated in a study. Qualitative findings are not simply the results of coding or categorizing (analogous to the running of statistical tests), but rather the researcher’s configuration of segments of coded data assembled into a novel whole. This whole will not necessarily be replicable even with the same coding rules. The finding in a report of a grounded theory study is not the number of codes or list of open, axial, or selective codes defined and illustrated with one or two quotations, but rather is itself the new conceptualization derived from this analytic work the researcher advances of the events under study. Moreover, this novel conceptualization includes something more than the data generated in interviews or from observations.

*Data-based result* here refers to the interpretations researchers derived not only from the transcripts and field notes generated from these interviews and observations (analogous to completed standardized tests) but also from the intellectual, philosophical, discipline-specific, and other such predilections individual researchers always bring to their inquiry. The discussion section is used to place this new conceptualization in the context of others that might compete with it and to show how it might be used as a basis for further research or a change in practice. An additional reason why qualitative findings might be hard even to find is that they might be placed (by authors themselves or by request of the publication venue) in the discussion (as opposed to result) section, whereas information about processing, numbers, lists, definitions, and examples of codes is placed in the results (instead of the method or data analysis) section.

Another challenge to the presentation of usable findings is that qualitative and quantitative research mandate different kinds of generalization. In contrast to the nomothetic or formal generalizations from representative samples to populations typically emphasized in quantitative research are the idiographic and analytic generalizations drawn from and about cases typically emphasized in qualitative research (Polit & Beck, 2010). Especially relevant to the reporting of qualitative research findings is Smaling’s (2003) description of a variation of “communicative generalization” (p. 17), that is, “receptive generalization” (p. 18) in which the mandate to address the generalizability of results falls to the reader, not the writer, of the report. Here writers are obliged to present their findings in ways that permit readers to assess the transferability of these findings to events and persons outside the study, and readers are obliged to have the knowledge needed to assess their transferability.

## Strategies to Enhance the Accessibility and Usability of Qualitative Health Research Findings

The key strategy to enhancing the accessibility and usability of qualitative health research findings is to write in the language of the readers toward whom they are directed. We now describe approaches researchers might consider in presenting their findings.

### Translating Findings Into Thematic Sentences

The identification of themes is foundational to qualitative research of all kinds. Indeed, we could not think of any qualitative method that does not inherently entail thematic analysis—or the search for something recurrent in a data set—and thematic synthesis, or the integration of data segments into some unifying idea. Grounded theories, ethnographies, phenomenological descriptions, and the results of narrative/discourse studies are composed of thematic syntheses of data variously unified in the forms of hypotheses, conceptual models, narratives, arguments, and other such modes of presentation.

Although there is no common understanding of *theme* among qualitative researchers (DeSantis & Ugarriza, 2000; Fredericks & Miller, 1997; Ryan & Bernard, 2003) and no clear line between qualitative content (Hsieh & Shannon, 2005) and thematic analysis (Braun & Clarke, 2006), knowing the difference between a theme and a topic is foundational to the crafting of accessible findings. For example, writing that trust, confidence, and symptoms were themes discerned in interviews with persons concerning their adherence to a treatment regimen conveys nothing thematic because these words as yet convey no idea concerning what researchers found out about trust, confidence, and symptoms in relation to treatment adherence. Trust, confidence, and symptoms are at this point simply words used to encompass segments of data researchers saw (i.e., coded) as belonging together. Although a single word such as *trust* “may name an idea [that word] does not operate as an idea until it is put into a sentence or assertion. . . . An idea needs a subject and a predicate before [writers] can use it as a basis of understanding” (Roberts, 1995, p. 97).

An example of an idea, or theme, here is that HIV-positive persons suggested an association among trust in their providers, symptoms of the disease, and medication adherence. Two statements further delineating this theme are that (a) mistrust and the absence of symptoms appeared to contribute to medication nonadherence whereas (b) trust alone—regardless of symptom presence or absence—contributed to medication adherence. Writers stay at the level of topic when they present data extracts they have

grouped into categories named *trust* or *symptoms* without clearly stating in one or more complete declarative sentences what the reader is to understand about trust and symptoms and their connection to adherence. These statements represent the researchers’ thematic syntheses, or coherent integrations of the disparate pieces of data that constitute the findings.

Writing thematic sentences is foundational to conveying qualitative health research findings regardless of the methods used to produce them. When done well, such statements summarize key ideas while preserving the complexity of the phenomena these ideas were meant to represent. Such statements will be intelligible to any reader fluent in the language (e.g., English, Spanish) of the research report but not necessarily fluent in the language of a methodology. For example, such statements might allow a wider range of readers better to comprehend highly interpreted findings such as phenomenological descriptions and the outcomes of discourse analyses. Moreover, such statements might help readers better to follow the line of ideas the writer hopes to communicate. Writers might consider using thematic statements as section headers in the results portion of reports in lieu of topical headers to enhance the accessibility of findings. Readers will apprehend the key findings of a study simply by reading the thematic statements introducing the sections devoted to detailing and providing the evidence for the ideas conveyed in them. In a grounded theory study, for example, each conceptual linkage in a theory might serve as a section header. Qualitative studies are especially amenable to uncovering causal mechanism (Maxwell, 2004). In addition to a visual display of causal paths, the presentation of findings in the form of sets of thematic statements delineating mechanism might therefore enhance their utilization value.

One highly structured way to write thematic sentences is Banning’s (2003) “ecological sentence synthesis.” As he described it, ecological sentence synthesis involves finding a sentence pattern or structure that can encompass in a comparable manner the results of a set of studies included in a systematic review. The example shown in his article is a table whereby information on each component of a common sentence is retrieved from each study reviewed. An abbreviated and modified version of this approach taken from Banning is shown in Table 1. Banning likened his approach to the open, axial, and selective coding associated with constant comparison analysis. These “open code ecological sentences” (p. 1) are then reduced to create “axial code . . . ecological sentences” from which a “selective or summary sentence” is derived (p. 5). Instead of a code that functions simply to label data segments seen to belong together, here the sentences function to capture complete ideas that can then be reduced to a comprehensive and highly structured but also parsimonious rendering of findings.

**Table 1.** Ecological Sentence Synthesis

Study	With this intervention	these outcomes occur	with these population foci	and within these grades	and in this sex of learners	and in these ethnicities	and in these settings.
Study 1	Basic skills	Social/behavioral	Multiple disabilities	Lower grade	Male	African American	Junior high school
				Upper grade	Female	White/European	High school
Study 2	Affective	Mood	Learning disability	Lower grade	Male	African American White/European	Correctional institution

Source: Abbreviated and modified from Banning (2003, p. 2).

**Table 2.** Example of Ecological Sentence Synthesis to Structure Primary Study Findings

Participant	This strategy	appeared in this phase of the illness trajectory	in persons of this sex	and of these ethnicities	expressing these concerns	and stating these goals.
Person 1	Full disclosure	At least 5 years from diagnosis	Male	African American	Need for health services	To alleviate burden of keeping secrets
			Female	White/European		
Person 2	Partial disclosure	Varied phases	Female	African American White/European	Discrimination	To maintain relationships

Although Banning proposed this interesting approach for presenting the results of multiple studies included in systematic reviews, we see the utility of this approach for presenting findings from individual primary studies. In the fictional example shown in Table 2, the sentence pattern—“This strategy appeared in this phase of the illness trajectory in persons of this sex and of these ethnicities, expressing these concerns, and stating these goals”—was constructed to capture comparable information from each of the participants interviewed in a study addressing how persons in varying phases of a chronic illness trajectory managed their illness. After further analysis, these sentences would serve as the basis for writing the thematic statements that might by themselves constitute the findings of this study (e.g., as products of a qualitative descriptive study) or might be further transformed, for example, into a conceptual model or set of working hypotheses (e.g., as products of a grounded theory study).

### *Translating Findings Into the Language of Intervention*

The translation of qualitative research findings into thematic statements is the basis for an approach for enhancing

the utilization value of qualitative health research findings, namely, to present these findings in the language of intervention study. Over the past decade, a spate of literature has appeared across health sciences venues describing the contributions of qualitative research to improving the design of intervention research (e.g., Brett, Heimendinger, Boender, Morin, & Marshall, 2002; de Salis, Tomlin, Toerien, & Donovan, 2008; Gamel, Gryphonck, Hengeveld, & Davis, 2001; Miller, Druss, & Rohrbaugh, 2003; Schumacher et al., 2005). Indeed, programs of intervention research are now expected to include qualitative studies for a host of purposes including developing the theoretical foundation for the intervention program of research, pilot testing of the feasibility and acceptability of the intervention and study measures, assessing characteristics of the subpopulations and settings that might moderate intervention effects, monitoring intervention fidelity, and confirming the active ingredients of interventions (Song et al., 2010).

This mandate can be used to translate into intervention language qualitative findings even from studies not necessarily originally conceived as part of an intervention program of research. For example, qualitative findings addressing some aspect of how people understand,

experience, and manage an illness can be staged as offering a theory of the problem or theoretical basis for selecting or not selecting particular approaches (i.e., interventions) to address that problem (Sidani & Braden, 1998). Qualitative findings addressing why people used or did not use a particular health service or did or did not adhere to prescribed treatment regimens can be staged as offering information on the active ingredient, dose, mode of delivery, acceptability, or burden of solutions advanced to improve utilization or adherence. Qualitative findings addressing comparisons between people (e.g., on demographic parameters, points of view, management strategies) can be staged as offering information on tailoring or customizing interventions to persons with different characteristics (e.g., Griffiths et al., 2010). In short, intervention talk can serve more explicitly to emphasize the utility of qualitative findings: that is, to show exactly where, how, and why research and practice might be changed to improve some health outcome. In addition, such intervention talk might make these findings more accessible to audiences targeted by a wider array of health sciences journals because they were translated into a language that might be more familiar to these audiences.

### *Translating Findings Into the Language of Implementation*

Authors might also consider positioning qualitative findings as contributing to implementation science, the prominence of which has grown rapidly over the past decade. Implementation science involves the study of how practice contexts interact with interventions and implementation processes to influence provider-, setting-, and system-level adoption, use, and maintenance of interventions (Damschroder et al., 2009; Glasgow & Emmons, 2007; Glasgow, Lichtenstein, & Marcus, 2003; Proctor et al., 2011; Rycroft-Malone, 2004). Despite the centrality of context to implementation science, “knowledge of which contextual features matter, when they matter, and how much they matter remains limited” (Weiner, Amick, Lund, Lee, & Hoff, 2011, p. 6).

Authors might present their findings in the results sections of their reports within an implementation framework or use the discussion section of their reports to show how their findings might contribute to the knowledge of context required effectively to implement new interventions or practices. Numerous implementation frameworks are available that authors can use to stage their findings (Fixsen, Blase, Naoom, & Wallace, 2009; Helfrich, Weiner, McKinney, & Minasian, 2007; Proctor et al., 2011). Damschroder and colleagues (2009) identified a variety of implementation frameworks and provided a consolidated summary of their key constructs. Qualitative research might thus be presented in terms of

information on contextual factors at the levels of health care providers, settings, and systems (Durlak & DuPre, 2008; Glasgow, 2008).

Like patients, health care providers operate within social systems comprising interpersonal networks and shared values, expectations, and norms (Castro, Barrera, & Holleran Steiker, 2010). Thus, findings from qualitative research with health care providers can be framed in relation to the feasibility and compatibility of different approaches to intervening as well as characteristics of providers that might predict variations in implementation outcomes. For example, relevant findings from an ethnographic study of nurses' work on a critical care unit, which might not have originally been conceived to contribute to implementation science, might be framed in terms of how the values, practices, and interpersonal networks of critical care nurses appeared to interact with new interventions or with the processes used to implement those interventions. The findings from studies of providers from different disciplines or working in different settings might be presented in relation to factors influencing implementation outcomes.

The settings and systems in which providers work are increasingly complex, involving interdependent interactions across multiple disciplines and departments (Scott, 2003). In response to this complexity, scholars are calling for systems approaches to implementation that address, among other contextual factors, the relationships, feedback loops, and interactions among a system's parts (Hawe, Shiell, & Riley, 2009). The findings from qualitative studies of practice settings might therefore be framed as contributing to a systems understanding of implementation. For example, the findings from ethnographic and narrative/discourse studies of ambulatory surgery units might be presented in terms of the contextual factors that facilitated or impeded the adaption, implementation, and maintenance of new interventions.

In addition to addressing the role of context, findings from qualitative research might be translated into guides for the development and use of implementation processes. Implementation processes are essentially interventions that target change at the level of providers and systems rather than patients; they might include reminder systems, audit and feedback, coaching, and a range of quality improvement methods (Helfrich et al., 2010; Leeman, Baernholdt, & Sandelowski, 2007; Shojanian et al., 2006). Because these implementation processes are also forms of intervention, staging qualitative research findings to feature these processes will be similar to translating findings into the language of intervention described previously. Thus, qualitative findings from a study of health care providers or settings might be framed as offering a theory of the implementation problem or theoretical basis for selecting among different implementation processes. For example,

findings from a study of health care professionals might indicate that an implementation problem is located at the level of the system and not the professionals working within the system, thereby requiring implementation processes that target system redesign. Qualitative findings addressing comparisons between providers or settings might be presented as a guide to tailoring implementation processes to best fit varying needs.

## Conclusion

Roberts (1995) observed that “writing is the sharpened, focused expression of thought and study” (p. 15). Writing accessible and usable qualitative health research findings means communicating in as sharp and focused a manner as possible the fuzziness and intricacy of the people and things selected for inquiry. Writing such findings requires understanding the meaning of design, or the “part form and content play” (Samara, 2007, p. 6). As Samara (p. 6) observed, “[T]o design is much more than simply to assemble, to order. . . . It is to add value and meaning, to illuminate, to simplify, to clarify . . . to dignify, . . . [and] to persuade.” Good designs are harmonious, are parsimonious, and communicate a clear message.

Our intention in writing this article was not to mandate rules for the presentation of qualitative health research findings; indeed, we are against such efforts to police and standardize. Rather, our objective was to add to researchers’ toolbox several approaches they might consider for presenting their findings. We recognize the artificiality of separating the analytic and interpretive work of qualitative inquiry from the work of presentation. We do so here only to emphasize the extent to which the “what is said” (i.e., content or the knowledge produced from a study) is shaped by the “how to say it” (i.e., the form in which that knowledge is presented). We recognize too, however, that efforts to say it will often lead to researchers’ recognition that they have not as yet clarified the “what to say.” The research writeup is thus both an outcome of efforts to know and a means to know.

The line we drew here between content and form raises questions about self-duplication, or self-plagiarism (e.g., Baggs, 2008; Broome, 2004). Is a researcher self-plagiarizing if, for example, she or he presents findings in one format for a journal targeting qualitative researchers and in another format for a journal targeting clinicians? Indeed, this line foregrounds the contradiction between the mandate against self-duplication and for reporting results in forms tailored, and forums targeted, to specific audiences. The underlying issue here is whether it is duplication of both content and form that is to be avoided. As content and form shape each other, this question—and specifically the question of whether differently said things are actually different things—is not easy to answer.

In conclusion, simplifying the presentation of qualitative health research findings does not violate the qualitative research mandate to capture the complexity of the experiential and social world targeted for inquiry. Indeed, by making complexity more comprehensible, simplification serves that end. Drawing a line between content and form as we have done here might help researchers not only to fashion findings more accessible and usable to a wider range of readers but also to motivate them to invent strategies to address the contradiction revealed by the very drawing of this line.

## Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## Funding

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Jennifer Leeman’s coauthorship of this article was funded by the University of North Carolina at Chapel Hill Mentored Career Development Program in Comparative Effectiveness (K12 HS019468 from the Agency for Healthcare Research and Quality).

## References

- Baggs, J. G. (2008). Issues and rules for authors concerning authorship versus acknowledgements, dual publication, self plagiarism, and salami publishing [Editorial]. *Research in Nursing & Health, 31*(4), 295-297. doi:10.1002/nur.20280
- Banning, J. H. (2003, July). *Ecological sentence synthesis*. Retrieved from <http://mycahs.colostate.edu/James.H.Banning/PDFs/Ecological%20Sentence%20Synthesis.pdf>
- Barbour, R. S. (2000). The role of qualitative research in broadening the “evidence base” for clinical practice. *Journal of Evaluation in Clinical Practice, 6*(2), 155-163.
- Bazerman, C. (1988). *Shaping written knowledge: The genre and activity of the experimental article in science*. Madison: University of Wisconsin Press.
- Boeije, H. R., van Wesel, F., & Alisic, E. (2011). Making a difference: Towards a method for weighing the evidence in a qualitative synthesis *Journal of Evaluation in Clinical Practice, 17*(4), 657-663. doi:10.1111/j.1365-2753.2011.01674.x
- Bower, E., & Scambler, S. (2007). The contributions of qualitative research towards dental public health practice. *Community Dentistry and Oral Epidemiology, 35*(3), 161-169. doi:10.1111/j.1600-0528.2006.00368.x
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101. doi:10.1191/1478088706qp063oa
- Brett, J. A., Heimendinger, J., Boender, C., Morin, C., & Marshall, J. A. (2002). Using ethnography to improve

- intervention design. *American Journal of Health Promotion*, 16(6), 331-340.
- Broome, M. E. (2004). Self-plagiarism: Oxymoron, fair use, or scientific misconduct? *Nursing Outlook*, 52(6), 273-274. doi:10.1016/j.outlook.2004.10.001
- Castro, F. G., Barrera, M., Jr., & Holleran Steiker, L. K. (2010). Issues and challenges in the design of culturally adapted evidence-based interventions. *Annual Review of Clinical Psychology*, 6(1), 213-239. doi:10.1146/annurev-clinpsy-033109-132032
- Caulley, D. N. (2008). Making qualitative research reports less boring: The techniques of writing creative nonfiction. *Qualitative Inquiry*, 14(3), 424-449. doi:10.1177/1077800407311961
- Cutcliffe, J. R., & Harder, H. G. (2009). The perpetual search for parsimony: Enhancing the epistemological and practical utility of qualitative research findings. *International Journal of Nursing Studies*, 46(9), 1401-1410. doi:10.1016/j.ijnurstu.2009.05.005
- Damschroder, L. J., Aron, D. C., Keith, R. E., Kirsh, S. R., Alexander, J. A., & Lowery, J. C. (2009). Fostering implementation of health services research findings into practice: A consolidated framework for advancing implementation science. *Implementation Science*, 4(1), 50. doi:10.1186/1748-5908-4-50
- Dearing, J. W., & Kreuter, M. W. (2010). Designing for diffusion: How can we increase uptake of cancer communication innovations? *Patient Education and Counseling*, 81(Suppl.), S100-S110. doi:10.1016/j.pec.2010.10.013
- de Salis, I., Tomlin, Z., Toerien, M., & Donovan, J. (2008). Using qualitative research methods to improve recruitment to randomized controlled trials: The Quartet Study. *Journal of Health Services Research & Policy*, 13(Suppl. 3), 92-96. doi:10.1258/jhsrp.2008.008028
- DeSantis, L., & Ugarriza, D. N. (2000). The concept of theme as used in qualitative nursing research. *Western Journal of Nursing Research*, 22(3), 351-372. doi:10.1177/0193945002204467
- Durlak, J. A., & DuPre, E. P. (2008). Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American Journal of Community Psychology*, 41(3-4), 327-350. doi:10.1007/s10464-008-9165-0
- Fixsen, D. L., Blase, K. A., Naoom, S. F., & Wallace, F. (2009). Core implementation components. *Research on Social Work Practice*, 19(5), 531-540. doi:10.1177/1049731509335549
- Fredericks, M., & Miller, S. I. (1997). Some brief notes on the "unfinished business" of qualitative inquiry. *Quality & Quantity*, 31(1), 1-13.
- Gamel, C., Gryphonck, M., Hengeveld, M., & Davis, B. (2001). A method to develop a nursing intervention: The contribution of qualitative studies to the process. *Journal of Advanced Nursing*, 33(6), 806-819. doi:10.1046/j.1365-2648.2001.01724.x
- Glasgow, R. E. (2008). What types of evidence are most needed to advance behavioral medicine? *Annals of Behavioral Medicine*, 35(1), 19-25. doi:10.1007/s12160-007-9008-5
- Glasgow, R. E., & Emmons, K. M. (2007). How can we increase translation of research into practice? Types of evidence needed. *Annual Review of Public Health*, 28(1), 413-433. doi:10.1146/annurev.publhealth.28.021406.144145
- Glasgow, R. E., Lichtenstein, E., & Marcus, A. C. (2003). Why don't we see more translation of health promotion research to practice? Rethinking the efficacy-to-effectiveness transition. *American Journal of Public Health*, 93(8), 1261-1267. doi:10.2105/AJPH.93.8.1261
- Green, L. W., Ottoson, J. M., Garcia, C., & Hiatt, R. A. (2009). Diffusion theory and knowledge dissemination, utilization, and integration in public health. *Annual Review of Public Health*, 30(1), 151-174. doi:10.1146/annurev.publhealth.031308.100049
- Griffiths, F., Borkan, J., Byrne, D., Crabtree, B. F., Dowrick, C., Gunn, J., . . . Sturt, J. (2010). Developing evidence for how to tailor medical interventions for the individual patient. *Qualitative Health Research*, 20, 1629-1641. doi:10.1177/1049732310377453
- Hawe, P., Shiell, A., & Riley, T. (2009). Theorizing interventions as events in systems. *American Journal of Community Psychology*, 43(3-4), 267-276. doi:10.1007/s10464-009-9229-9
- Helfrich, C. D., Damschroder, L. J., Hagedorn, H. J., Daggett, G. S., Sahay, A., Ritchie, M., . . . Stetler, C. B. (2010). A critical synthesis of literature on the Promoting Action on Research Implementation in Health Services (PARiHS) framework. *Implementation Science*, 5(1), 82. doi:10.1186/1748-5908-5-82
- Helfrich, C. D., Weiner, B. J., McKinney, M. M., & Minasian, L. (2007). Determinants of implementation effectiveness: Adapting a framework for complex innovations. *Medical Care Research and Review*, 64(3), 279-303. doi:10.1177/1077558707299887
- Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15, 1277-1288. doi:10.1177/1049732305276687
- Keen, S., & Todres, L. (2006, April). *Communicating qualitative research findings: An annotated bibliographic review of non-traditional dissemination strategies*. Bournemouth, UK: Bournemouth University, Institute of Health and Community Studies, Center for Qualitative Research. Retrieved from [http://eprints.bournemouth.ac.uk/5715/1/Dissemination\\_report\\_FINAL\\_24Apr06.pdf](http://eprints.bournemouth.ac.uk/5715/1/Dissemination_report_FINAL_24Apr06.pdf)
- Keen, S., & Todres, L. (2007). Strategies for disseminating qualitative research findings: Three exemplars. *Forum: Qualitative Social Research*, 8(3), Art. 17. Retrieved from <http://nbn-resolving.de/urn:nbn:de:0114-fqs0703174>
- Leeman, J., Baernholdt, M., & Sandelowski, M. (2007). Developing a theory-based taxonomy of methods for implementing change in practice. *Journal of Advanced Nursing*, 58(2), 191-200. doi:10.1111/j.1365-2648.2006.04207.x



- Leys, M. (2003). Health technology assessment: The contribution of qualitative research. *International Journal of Technology Assessment in Health Care*, 19(2), 317-329. doi:10.1017/S026646230300028X
- Love, K., Pritchard, C., Maguire, K., McCarthy, A., & Paddock, P. (2005). Qualitative and quantitative approaches to health impact assessment: An analysis of the political and philosophical milieu of the multimethod approach. *Critical Public Health*, 15(3), 275-289. doi:10.1080/09581590500372477
- Mangione-Smith, R., DeCristofaro, A. H., Setodji, C. M., Keesey, J., Klein, D. J., Adams, J. L., . . . McGlynn, E. A. (2007). The quality of ambulatory care delivered to children in the United States. *New England Journal of Medicine*, 357(15), 1515-1523. doi:10.1056/NEJMsa064637
- Maxwell, J. A. (2004). Using qualitative methods for causal explanation. *Field Methods*, 16(3), 243-264. doi:10.1177/1525822X04266831
- McEwan, M. J., Espie, C. A., & Metcalfe, J. (2004). A systematic review of the contribution of qualitative research to the study of quality of life in children and adolescents with epilepsy. *Seizure*, 13(1), 3-14. doi:10.1016/S1059-1311(03)00081-5
- McGlynn, E. A., Asch, S. M., Adams, J., Keesey, J., Hicks, J., DeCristofaro, A., & Kerr, E. A. (2003). The quality of health care delivered to adults in the United States. *New England Journal of Medicine*, 348(26), 2635-2645.
- Miller, C. L., Druss, B. G., & Rohrbach, R. M. (2003). Using qualitative methods to distill the active ingredients of a multifaceted intervention. *Psychiatric Services*, 54(4), 568-571.
- Mitton, C., Adair, C. E., McKenzie, E., Patten, S. B., & Wayne Perry, B. (2007). Knowledge transfer and exchange: Review and synthesis of the literature. *Milbank Quarterly*, 85(4), 729-768. doi:10.1111/j.1468-0009.2007.00506.x
- Morse, J. M., Coulehan, J., Thorne, S., Bottorff, J. L., Cheek, J., & Kuzel, A. J. (2009). Data expressions or expressing data [Editorial]. *Qualitative Health Research*, 19, 1035-1036. doi:10.1177/1049732309338719
- Ong, B., & Richardson, J. C. (2006). The contribution of qualitative approaches to musculoskeletal research [Editorial]. *Rheumatology*, 45(4), 369-370. doi:10.1093/rheumatology/ kel022
- Polit, D. F., & Beck, C. T. (2010). Generalization in quantitative and qualitative research: Myths and strategies. *International Journal of Nursing Studies*, 47(11), 1451-1458. doi:10.1016/j.ijnurstu.2010.06.004
- Pope, C., Mays, N., & Popay, J. (2007). *Synthesizing qualitative and quantitative health evidence*. Berkshire, UK: Open University Press.
- Proctor, E., Silmere, H., Raghavan, R., Hovmand, P., Aarons, G., Bunger, A., . . . Hensley, M. (2011). Outcomes for implementation research: Conceptual distinctions, measurement challenges, and research agenda. *Administration and Policy in Mental Health*, 38(2), 65-76. doi:10.1007/s10488-010-0319-7
- Roberts, E. V. (1995). *Writing about literature* (8th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Ryan, G. W., & Bernard, H. R. (2003). Techniques to identify themes. *Field Methods*, 15(1), 85-109. doi:10.1177/1525822X02239569
- Rycroft-Malone, J. (2004). The PARIHS framework—A framework for guiding the implementation of evidence-based practice. *Journal of Nursing Care Quality*, 19(4), 297-304. doi:10.1097/00001786-200410000-00002
- Samara, T. (2007). *Design elements: A graphic style manual*. Gloucester, MA: Rockport.
- Sandelowski, M. (2004). Using qualitative research. *Qualitative Health Research*, 14, 1366-1386. doi:10.1177/1049732304269672
- Sandelowski, M., & Barroso, J. (2002). Finding the findings in qualitative studies. *Journal of Nursing Scholarship*, 34(3), 213-219. doi:10.1111/j.1547-5069.2002.00213.x
- Sandelowski, M., Voils, C. I., & Knafl, G. (2009). On quantizing. *Journal of Mixed Methods Research*, 3, 208-222.
- Schumacher, K. L., Koresawa, S., West, C., Dodd, M., Paul, S. M., Tripathy, D., . . . Miaskowski, C. (2005). Qualitative research contribution to a randomized clinical trial. *Research in Nursing & Health*, 28(3), 268-280. doi:10.1002/nur.20080
- Scott, W. R. (2003). *Organizations: Rational, natural, and open systems*. Upper Saddle River, NJ: Prentice Hall.
- Shojania, K. G., Ranji, S. R., McDonald, K. M., Grimshaw, J. M., Sundaram, V., Rushakoff, R. J., & Owens, D. K. (2006). Effects of quality improvement strategies for type 2 diabetes on glycemic control: A meta-regression analysis. *Journal of the American Medical Association*, 296(4), 427-440. doi:10.1001/jama.296.4.427
- Sidani, S., & Braden, C. J. (1998). *Evaluating nursing interventions: A theory-driven approach*. Thousand Oaks, CA: Sage.
- Smaling, A. (2003). Inductive, analogical, and communicative generalization. *International Journal of Qualitative Methods*, 2(1), Art. 5. Retrieved from [http://www.ualberta.ca/~iiqm/backissues/2\\_1/pdf/smaling.pdf](http://www.ualberta.ca/~iiqm/backissues/2_1/pdf/smaling.pdf)
- Song, M., Sandelowski, M., & Happ, M. B. (2010). Current practices and emerging trends in conducting mixed-methods intervention studies in the health sciences. In A. Tashakkori & C. Teddlie (Eds.), *Sage handbook of mixed methods in social & behavioral research* (2nd ed., pp. 725-747). Thousand Oaks, CA: Sage.
- Star, S. L. (1983). Simplification in scientific work: An example from neuroscience research. *Social Studies of Science*, 13(2), 205-228. doi:10.1177/030631283013002002
- Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated Criteria for Reporting Qualitative Research (COREQ): A 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, 19(6), 349-357. doi:10.1093/intqhc/mzm042
- van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. Albany: State University of New York Press.

- Weiner, B. J., Amick, H. R., Lund, J. L., Lee, S. Y., & Hoff, T. J. (2011). Use of qualitative methods in published health services and management research: A 10-year review. *Medical Care Research and Review*, 68(1), 3-33. doi:10.1177/1077558710372810
- Wilson, P. M., Petticrew, M., Calnan, M. W., & Nazareth, I. (2010). Disseminating research findings: What should researchers do? A systematic scoping review of conceptual frameworks. *Implementation Science*, 5(1), 91. Retrieved from [www.implementationscience.com/content/5/1/91](http://www.implementationscience.com/content/5/1/91)

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