

4-2-2024

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Recommended Citation

George AZ. Research frameworks: critical components for reporting qualitative health care research. J Patient Cent Res Rev. 2024;11:4-7. doi: [10.17294/2330-0698.2068](https://doi.org/10.17294/2330-0698.2068)

Published quarterly by Midwest-based health system Advocate Aurora Health and indexed in PubMed Central, the Journal of Patient-Centered Research and Reviews (JPCRR) is an open access, peer-reviewed medical journal focused on disseminating scholarly works devoted to improving patient-centered care practices, health outcomes, and the patient experience.

Research Frameworks: Critical Components for Reporting Qualitative Health Care Research

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Abstract

Qualitative health care research can provide insights into health care practices that quantitative studies cannot. However, the potential of qualitative research to improve health care is undermined by reporting that does not explain or justify the research questions and design. The vital role of research frameworks for designing and conducting quality research is widely accepted, but despite many articles and books on the topic, confusion persists about what constitutes an adequate underpinning framework, what to call it, and how to use one. This editorial clarifies some of the terminology and reinforces why research frameworks are essential for good-quality reporting of all research, especially qualitative research. (*J Patient Cent Res Rev*. 2024;11:4-7.)

Keywords

qualitative research, health care, theory, research frameworks, theoretical frameworks, conceptual frameworks

Qualitative research provides valuable insights into health care interactions and decision-making processes – for example, why and how a clinician may ignore prevailing evidence and continue making clinical decisions the way they always have.¹ The perception of qualitative health care research has improved since a 2016 article by Greenhalgh et al. highlighted the higher contributions and citation rates of qualitative research than those of contemporaneous quantitative research.² The Greenhalgh et al. article was subsequently supported by an open letter from 76 senior academics spanning 11 countries to the editors of the *British Medical Journal*.³ Despite greater recognition and acceptance, qualitative research continues to have an “uneasy relationship with theory,”⁴ which contributes to poor reporting.

As an editor for the *Journal of Patient-Centered Research and Reviews*, as well as *Human Resources for Health*, I have seen several exemplary qualitative articles with clear and coherent reporting. On the other hand, I have often been concerned by a lack of rigorous reporting, which may reflect and reinforce the outdated perception of qualitative research as the “soft option.”⁵ Qualitative research is more than conducting a few semi-structured

interviews, transcribing the audio recordings verbatim, coding the transcripts, and developing and reporting themes, including a few quotes. Qualitative research that benefits health care is time-consuming and labor-intensive, requires robust design, and is rooted in theory, along with comprehensive reporting.⁶

What Is “Theory”?

So fundamental is theory to qualitative research that I initially toyed with titling this editorial, “*Theory: the missing link in qualitative health care research articles*,” before deeming that focus too broad. As far back as 1967, Merton⁶ warned that “the word theory threatens to become meaningless.” While it cannot be overstated that “atheoretical” studies lack the underlying logic that justifies researchers’ design choices, the word *theory* is so overused that it is difficult to understand what constitutes an adequate *theoretical foundation* and what to call it.

Theory, as used in the term *theoretical foundation*, refers to the existing body of knowledge.^{7,8} The existing body of knowledge consists of more than formal *theories*, with their explanatory and predictive characteristics, so theory implies more than just *theories*. Box¹⁹⁻¹² defines the “building blocks of formal theories.”⁹ Theorizing or theory-building starts with concepts at the most concrete, experiential level, becoming progressively more abstract until a higher-level theory is developed that explains the relationships between the building blocks.⁹ Grand theories are broad, representing the most abstract level of theorizing. Middle-range and explanatory theories are progressively less abstract, more specific to particular

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phenomena or cases (middle-range) or variables (explanatory), and testable.

Box 1: The Building Blocks of Formal Theories⁹	
Concepts	words we assign to mental representations of events or phenomena ^{9,10}
Constructs	higher-order clusters of concepts ⁹
Propositions	expressions of relationships among several constructs ⁹
Theories	“sets of interrelated constructs, definitions, and propositions that present a systematic view of phenomena by specifying relations among variables and phenomena” ¹¹ OR general sets “of principles that are independent of the specific case, situation, phenomenon or observation to be explained” ¹²

The Importance of Research Frameworks

Researchers may draw on several elements to frame their research. Generally, a framework is regarded as “a set of ideas that you use when you are forming your decisions and judgements”¹³ or “a system of rules, ideas, or beliefs that is used to plan or decide something.”¹⁴ Research frameworks may consist of a single formal theory or part thereof, any combination of several theories or relevant constructs from different theories, models (as simplified representations of formal theories), concepts from the literature and researchers’ experiences.

Although Merriam¹⁵ was of the view that every study has a framework, whether explicit or not, there are advantages to using an explicit framework. Research frameworks map “the territory being investigated,”¹⁸ thus helping researchers to be explicit about what informed their research design, from developing research questions and choosing appropriate methods to data analysis and interpretation. Using a framework makes research findings more meaningful¹² and promotes generalizability by situating the study and interpreting data in more general terms than the study itself.¹⁶

Theoretical and Conceptual Frameworks

The variation in how the terms *theoretical* and *conceptual frameworks* are used may be confusing. Some researchers refer to only theoretical frameworks^{17,18} or conceptual frameworks,¹⁹⁻²¹ while others use the terms interchangeably.⁷ Other researchers distinguish between the two. For example, Miles, Huberman & Saldana⁸ see theoretical frameworks as based on formal theories and conceptual frameworks derived inductively from locally relevant concepts and variables, although they may include theoretical aspects. Conversely, some researchers believe that theoretical frameworks include formal theories and concepts.¹⁸ Others argue that any differences

between the two types of frameworks are semantic and, instead, emphasize using a research framework to provide coherence across the research questions, methods and interpretation of the results, irrespective of what that framework is called.

Like Ravitch and Riggan,²² I regard *conceptual frameworks* (CFs) as the broader term. Including researchers’ perspectives and experiences in CFs provides valuable sources of originality. Novel perspectives guard against research repeating what has already been stated.²³ The term *theoretical framework* (TF) may be appropriate where formal published and identifiable theories or parts of such theories are used.²⁴ However, existing formal theories alone may not provide the current state of relevant concepts essential to understanding the motivation for and logic underlying a study. Some researchers may argue that relevant concepts may be covered in the literature review, but what is the point of literature reviews and prior findings unless authors connect them to the research questions and design? Indeed, Sutton & Straw²⁵ exclude literature reviews and lists of prior findings as an adequate foundation for a study, along with individual lists of variables or constructs (even when the constructs are defined), predictions or hypotheses, and diagrams that do not propose relationships. One or more of these aspects could be used in a research framework (eg, in a TF), and the literature review could (and should) focus on the theories or parts of theories (constructs), offer some critique of the theory and point out how they intend to use the theory. This would be more meaningful than merely describing the theory as the “background” to the study, without explicitly stating why and how it is being used. Similarly, a CF may include a discussion of the theories being used (basically, a TF) and a literature review of the current understanding of any relevant concepts that are not regarded as formal theory.

It may be helpful for authors to specify whether they are using a theoretical or a conceptual framework, but more importantly, authors should make explicit how they constructed and *used* their research framework. Some studies start with research frameworks of one type and end up with another type,^{8,22} underscoring the need for authors to clarify the type of framework used and how it informed their research. Accepting the sheer complexity surrounding research frameworks and lamenting the difficulty of reducing the confusion around these terms, Box 2²⁶⁻³¹ and Box 3 offer examples highlighting the fundamental elements of theoretical and conceptual frameworks while acknowledging that they share a common purpose.

Box 2: Examples of How Theoretical Frameworks May Be Used	
Example 1	The Southern African Association of Health Educationalist's best publication of 2023 reported on a non-inferiority randomized control trial comparing video demonstrations and bedside tutorials for teaching pediatric clinical skills. ²⁶ The authors combined the social cognitive <i>model</i> of sequential skill acquisition ^{27,28} and Peyton's approach to teaching procedural and physical examination skills ^{29,30} to provide the theoretical justification for skill demonstrations forming the first step in bedside teaching. This premise formed the basis for the study and informed the interpretation of the results.
Example 2	Maxwell ³¹ describes how a researcher used a theoretical framework based on three formal theories to understand the "day-to-day work" of a medical group practice and to emphasize aspects of his results. This example illustrates the use of existing formal theories (one of which Maxwell describes as being less "identified than the other two") to understand the phenomenon of interest and provide a frame of reference for interpreting the results.

Misconceptions About Qualitative Research

Qualitative research's "uneasy relationship with theory"³⁴ may be due to several misconceptions. One possible misconception is that qualitative research aims to build theory and thus does not need theoretical grounding. The reality is that all qualitative research methods, not just Grounded Theory studies focused on theory building, may lead to theory construction.¹⁶ Similarly, all types of qualitative research, including Grounded Theory studies, should be guided by research frameworks.¹⁶

Not using a research framework may also be due to misconceptions that qualitative research aims to understand people's perspectives and experiences *without* examining them from a particular theoretical perspective or that theoretical foundations may influence researchers' *interpretations* of participants' meanings. In fact, in the same way that participants' meanings vary, qualitative researchers' interpretations (as opposed to descriptions) of participants' meaning-making will differ.^{32,33} Research frameworks thus provide a frame of reference for "making sense of the data."³⁴

Box 3: Examples of How Conceptual Frameworks May Be Used	
There is complexity around how conceptual frameworks are developed and used to inform research design, so consider the following examples: the first is based on the work of one of my doctoral students in medical education (with permission from Dr. Neetha Erumeda). The second is a fictitious account based on the normalization process model, which has been used in qualitative health care research.	
Example 1	In a study evaluating a postgraduate medical training program, Dr. Erumeda constructed a conceptual framework based on a logic model . Logic models graphically represent causal relationships between programmatic inputs, activities, outputs, and outcomes linearly, and they can be based on different theories , eg, theories of action, which focus on programmatic inputs and activities, or theories of change, which focus on programmatic outcomes. Dr. Erumeda based her initial CF on a formal theory of change. She then selected concepts to include in her logic model, based on the literature and her experiences of teaching in the program being evaluated. Once she had a diagrammatic representation of her logic model and the concepts she would focus on, she discussed the current understanding of each concept from the literature. After an analysis of her results, Dr. Erumeda modified her initial CF by incorporating her findings and the insights. Her final logic model represented a theory of action, allowing her to offer recommendations to improve the training program.
Example 2	To study the implementation of a complex innovation into a health care system, one might employ the normalization process model , which is a representation of normalization process theory . The model consists of four constructs regarding the innovation: 1) how it is enacted by the people doing it (interactional workability), 2) how it is understood within the networks of people around it (relational integration), 3) how it fits with existing divisions of labor (skill set workability), and 4) how it is sponsored or controlled by the organization in which it is taking place (contextual integration). Constructing a conceptual framework would require researchers to consider how the innovation relates to each of the constructs in the model, to identify concepts that make up the constructs and to consider their experiences of the concepts (eg, how they conceive the prevailing work ethic or experience the managerial hierarchy). They may also be able to postulate tentative relationships between different constructs or concepts or decide to focus on particular aspects of the model, which they could explore conceptually using the literature. Their research design would be influenced by their areas of interest, which would, in turn, determine their research methods. The findings could allow them to modify their model with evidence-based relationships and new concepts.

Summary

Studies informed by well-defined research frameworks can make a world of difference in alleviating misconceptions. Good qualitative reporting requires research frameworks that make explicit the combination of relevant theories, theoretical constructs and concepts that will permeate every aspect of the research. Irrespective of the term used, research frameworks are critical components of reporting not only qualitative but also all types of research.

Acknowledgments

In memory of Martie Sanders: supervisor, mentor, and colleague. My deepest gratitude for your unfailing support and guidance. I feel your loss.

Conflicts of Interest

None.

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