

Choosing a Qualitative Research Approach

Arianne Teherani, PhD
Tina Martimianakis, PhD
Terese Stenfors-Hayes, PhD

Anupma Wadhwa, MD
Lara Varpio, PhD

The Challenge

Educators often pose questions about qualitative research. For example, a program director might say: “I collect data from my residents about their learning experiences in a new longitudinal clinical rotation. If I want to know about their learning experiences, should I use qualitative methods? I have been told that there are many approaches from which to choose. Someone suggested that I use grounded theory, but how do I know this is the best approach? Are there others?”

What Is Known

Qualitative research is the systematic inquiry into social phenomena in natural settings. These phenomena can include, but are not limited to, how people experience aspects of their lives, how individuals and/or groups behave, how organizations function, and how interactions shape relationships. In qualitative research, the researcher is the main data collection instrument. The researcher examines why events occur, what happens, and what those events mean to the participants studied.^{1,2}

Qualitative research starts from a fundamentally different set of beliefs—or paradigms—than those that underpin quantitative research. Quantitative research is based on *positivist* beliefs that there is a singular reality that can be discovered with the appropriate experimental methods. *Post-positivist* researchers agree with the positivist paradigm, but believe that environmental and individual differences, such as the learning culture or the learners’ capacity to learn, influence this reality, and that these differences are important. *Constructivist* researchers believe that there is no single reality, but that the researcher elicits participants’ views of reality.³ Qualitative research generally draws on post-positivist or constructivist beliefs.

Qualitative scholars develop their work from these beliefs—usually post-positivist or constructivist—using different approaches to conduct their research. In this Rip Out, we describe 3 different qualitative research approaches commonly used in medical education: grounded theory, ethnography, and phenomenology. Each acts as a pivotal frame that shapes the research question(s), the method(s) of data collection, and how data are analyzed.^{4,5}

DOI: <http://dx.doi.org/10.4300/JGME-D-15-00414.1>

Editor’s Note: The online version of this article contains a list of further reading resources and the authors’ professional information.

Choosing a Qualitative Approach

Before engaging in any qualitative study, consider how your views about what is possible to study will affect your approach. Then select an appropriate approach within which to work. Alignment between the belief system underpinning the research approach, the research question, and the research approach itself is a prerequisite for rigorous qualitative research. To enhance the understanding of how different approaches frame qualitative research, we use this introductory challenge as an illustrative example.

The clinic rotation in a program director’s training program was recently redesigned as a longitudinal clinical experience. Resident satisfaction with this rotation improved significantly following implementation of the new longitudinal experience. The program director wants to understand how the changes made in the clinic rotation translated into changes in learning experiences for the residents.

Qualitative research can support this program director’s efforts. Qualitative research focuses on the events that transpire and on outcomes of those events from the perspectives of those involved. In this case, the program director can use qualitative research to understand the impact of the new clinic rotation on the learning experiences of residents. The next step is to decide which approach to use as a frame for the study.

The TABLE lists the purpose of 3 commonly used approaches to frame qualitative research. For each frame, we provide an example of a research question that could direct the study and delineate what outcomes might be gained by using that particular approach.

How You Can Start TODAY

1. *Examine the foundations of the existing literature:* As part of the literature review, make note of what is known about the topic *and* which approaches have been used in prior studies. A decision should be made to determine the extent to which the new study is exploratory and the extent to which findings will advance what is already known about the topic.
2. *Find a qualitatively skilled collaborator:* If you are interested in doing qualitative research, you should consult with a qualitative expert. Be prepared to talk to the qualitative scholar about *what* you would like to study and *why*. Furthermore, be ready to describe the literature to date on the topic (remember, you are asking for this person’s expertise regarding qualitative approaches—he or she won’t

TABLE
Methodology Overview

Approach	Purpose	Illustrative Question	Illustrative Outcome
Grounded theory	To develop theories grounded in the study data.	What factors impact residents' preferences for learning on the clinic rotation?	Results would build a theoretical model describing how individual-, contextual- and teacher-related factors impacted residents' preference for learning.
Ethnography	To develop an in-depth understanding of the culture of a context from the point of view of the study subjects through immersion in that setting over an extended period of time.	How do residents experience learning in the context of the learning culture in the clinic rotation?	Results would contribute to our understanding of the learning culture of the clinic over the course of a year as the residents engage in the clinic rotation, learn from rotation activities, and interact with members of the care team in their day-to-day activities.
Phenomenology	To describe the essence of a phenomenon by exploring it from the perspective of those who experienced it so as to understand the meaning participants ascribe to that phenomenon.	How do residents experience <i>learning</i> in the longitudinal clinic rotation structure?	Results would contribute to our understanding of the phenomenon of learning in this particular context. Interviews would be used to understand how residents experienced their learning, including what they learned and how they learned it.

necessarily have content expertise). Qualitative research must be designed and conducted with rigor (rigor will be discussed in Rip Out No. 8 of this series). Input from a qualitative expert will ensure that rigor is employed from the study's inception.

3. *Consider the approach:* With a literature review completed and a qualitatively skilled collaborator secured, it is time to decide which approach would be best suited to answering the research question. Questions to consider when weighing approaches might include the following:
 - Will my findings contribute to the creation of a theoretical model to better understand the area of study? (*grounded theory*)
 - Will I need to spend an extended amount of time trying to understand the culture and process of a particular group of learners in their natural context? (*ethnography*)
 - Is there a particular phenomenon I want to better understand/describe? (*phenomenology*)

What You Can Do LONG TERM

1. *Develop your qualitative research knowledge and skills:* A basic qualitative research textbook is a valuable investment to learn about qualitative research (further reading is provided as online supplemental material). A novice qualitative researcher will also benefit from participating in a massive online open course or a mini-course (often offered by professional organizations or conferences) that provides an introduction to qualitative research. Most of all, collaborating with a qualitative researcher can provide the support necessary to design, execute, and report on the study.
2. *Undertake a pilot study:* After learning about qualitative methodology, the next best way to gain

expertise in qualitative research is to try it in a small scale pilot study with the support of a qualitative expert. Such application provides an appreciation for the thought processes that go into designing a study, analyzing the data, and reporting on the findings. Alternatively, if you have the opportunity to work on a study led by a qualitative expert, take it! The experience will provide invaluable opportunities for learning how to engage in qualitative research.

References and Resources for Further Reading

1. Bogdan R, Biklen SK. *Qualitative Research for Education: An Introduction to Theories and Methods*. 5th ed. London, UK: Pearson; 2006.
2. Corbin J, Strauss A, eds. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. 3rd ed. Thousand Oaks, CA: SAGE Publications; 2008.
3. Bergman E, de Feijter J, Frambach J, Godefrooij M, Slootweg I, Stalmeyer R, et al. AM last page: a guide to research paradigms relevant to medical education. *Acad Med*. 2012;87(4):545.
4. Howell KE. *An Introduction to the Philosophy of Methodology*. Thousand Oaks, CA: SAGE Publications; 2013.
5. Denzin NK, Lincoln YS, eds. *The SAGE Handbook of Qualitative Research*. 4th ed. Thousand Oaks, CA: SAGE Publications; 2011.



The views expressed in this article are those of the authors and do not necessarily reflect the official policy or position of the Uniformed Services University of the Health Sciences, the Department of the Navy, the Department of Defense, or the US government.

Corresponding author: Arianne Teherani, PhD, University of California, San Francisco, School of Medicine, Office of Research and Development in Medical Education, Box 3202, 1855 Folsom Avenue, Suite 200, San Francisco, CA 94143-3202, 415.509.4988, teherani@medsch.ucsf.edu