Necessary Groundwork: Planning a Strong Grounded Theory Study

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The Challenge

Let's say you are interested in the problem of physician maldistribution—why certain geographical regions face chronic physician shortages, while others experience a surplus. Intrigued by the potential of a qualitative research approach to deepen the understanding of this problem, you decide to interview physicians about how they chose where to practice. You devise a list of 10 open-ended questions and recruit 15 physicians for interviews, which you conduct over the course of a week. Now, you have 15 transcripts sitting on your desk, awaiting analysis.

Inspired by recent medical education publications that used grounded theory to build a conceptual understanding of challenging problems like this one, you hope to do a grounded theory study with your data. You contact a colleague with expertise in qualitative research and ask where to start.

The Short Answer

Your colleague's response is disheartening. You can perhaps do a thematic analysis of your data, but you can't do a grounded theory study.

"I wish you'd come to me earlier," your colleague says.

The Long Answer: Methodology Versus Methods

Your choice of methodology must be made earlier in the process. A study's methodology is its backbone. Methodology means the underpinning philosophy that guides how inquiry should proceed; its assumptions and principles guide every step of the research decision-making process (see the Rip Out "Choosing a Qualitative Research Approach" for a review of 3 different qualitative methodologies[1]). Methods, in contrast, are the tools of the trade—the investigative procedures used to collect and analyze data. For example, methods for data collection include interviews, focus groups, and observations (see the Rip Out "Design: Selection of Data Collection Methods" for a review of 5 common qualitative data collection methods[2]), while methods for analyzing data include coding, constant comparison, and mapping.[3] No methodology claims exclusive ownership of any particular method, although certain methods are more routinely used within some methodologies than others. For example, ethnography tends to rely on observation as a data collection method, while grounded theory typically uses constant comparison as an analytic method.

Decisions about methodology shouldn't be made midway through a study—they are foundational decisions that influence each subsequent choice that a researcher makes. In the challenge at hand, it is too late in the game to craft a credible grounded theory study. But why? What necessary groundwork is missing?

Guiding Principles

Although the nuances of grounded theory methodology are hotly debated, there are 2 characteristic features of the methodology that are uncontested: iteration and theoretical sampling. Without these elements, you cannot claim to be conducting a grounded theory study. Iteration and theoretical sampling cannot be injected post hoc into an existing data set; enacting these key features requires careful advance planning.

Iteration

Iteration means that data collection and data analysis "blur and intertwine continually"[4]; the processes unfold concurrently, each influencing the other. In an interview-based grounded theory study, researchers begin reading and analyzing transcripts early, rather than waiting until all interviews have been completed. They examine data from the first 2 or 3 interviews, asking probing questions as they go. What data require further elaboration? What data are surprising or unexpected? Based on these early analytic forays, they modify and refine the interview approach, adding a follow-up question here and a new probe there in order to explore more fully the ideas they see developing. The process continues as more data are collected and examined, allowing nascent interpretations of data to be tested with later interview participants.

The iterative approach required by grounded theory has pragmatic implications for study design. Data cannot be collected all at once. Researchers need to plan for iteration, allowing gaps in data collection that permit concurrent analysis, and they must continuously reflect on how data collection might need to be adjusted to facilitate deeper exploration of key ideas and concepts. Analysis cannot be put off until the end, nor can it be thought of as the second stage of the research. Researchers must create a schedule that fosters not only gathering data but also continual thinking about what data mean, right from the start. In our example, the decision to interview 15 physicians in a single week, though attractive in its

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seeming efficiency, erased the opportunity for iteration that a grounded theory study would have required.

Theoretical Sampling

If iteration is the process that ensures you are reflecting on your data from the beginning, then theoretical sampling is the technique that allows you to act on those reflections. In a grounded theory study, your initial sampling strategy is merely a jumping-off point; you target a group of individuals for interviews, for example, who you anticipate will offer insights on the problem at hand. Theoretical sampling means "seeking and collecting pertinent data to elaborate and refine categories in your emerging theory."[5] As you identify key ideas in your data, you consider whether new sources of data are necessary to facilitate your understanding and interpretation of those ideas.

How might theoretical sampling play out in a study of how physicians choose where they will practice? Initial interviews might target physicians in their first 3 years in practice, anticipating that those individuals will be most informative because they are closest to the decision-making process. From this starting point, however, the sampling strategy will adapt to the needs of the ongoing analysis. Suppose you identify, in those early interviews, recurring notions of uncertainty, as participants reveal ambivalence about their initial practice choice and speculate about changing practice location in the future. To pursue this uncertainty and how it is resolved, you could (1) add interview probes to explore the idea more in depth with subsequent participants, and (2) recruit from new populations that might offer deeper insights into this particular issue, such as physicians who have been in the same practice location for more than 10 years, or those who have recently changed practice locations. In our example, there was no allowance made for the sampling strategy to shift to accommodate the developing understanding of the data—another opportunity lost.

Grounded theory aims to generate theory. Done well, it can advance our understanding of social or psychological processes. But the potential of grounded theory can only be harnessed if its foundational principles guide the study's design decisions from the beginning. Iteration and theoretical sampling allow researchers to act as engaged explorers rather than passive data gatherers. These techniques require deliberate planning; they cannot be added on at the end.

How You Can Start TODAY

- When you identify a research question of interest, begin your inquiry by selecting a qualitative methodology that will guide how you deploy data collection and analysis methods.
- Read about your chosen methodology, and seek mentorship from someone experienced in its use before you start any research activities.
- Invest time at the outset of your study to map out your design plan and ensure it aligns with your methodology's philosophy.

What You Can Do LONG TERM

Methodologic mastery takes time. You can nurture your research artistry by being reflective about your own work and by sharing your ideas and your struggles with other qualitative researchers. While we regularly discuss results and their interpretation with colleagues to test out the resonance of our ideas, we often neglect in-depth discussions of methodology. Routinely talk not only about *what* you found, but also about *how* you found it.

Resources

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