Illuminating the path: a methodological exploration of grounded theory in doctoral theses

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Received 27 July 2023 Revised 4 October 2023 Accepted 18 October 2023

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Abstract

Purpose — This article explores challenges faced by doctoral candidates using grounded theory (GT) in their theses, focusing on coding, theory development and time constraints. It also examines the impact of doctoral committees on GT dissertations, addressing epistemological clashes and the desire for familiarity over novelty. **Design/methodology/approach** — Drawing from a multilevel autoethnography and related literature, this study offers pragmatic solutions and strategies for a seamless research journey.

Findings – Coding, theory development and time constraints pose universal challenges, requiring mentorship for effective navigation. Addressing committee dynamics is crucial for developing novel theoretical frameworks.

Originality/value — The article empowers researchers to overcome GT challenges, delving into various positions within the GT paradigm, fostering transparency and facilitating original contributions to their fields.

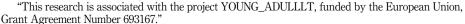
Keywords Grounded theory, Doctoral theses, Qualitative methodology, Coding, Theory development **Paper type** Conceptual paper

1. Introduction

In the realm of academic research, grounded theory (GT) has emerged as a prominent qualitative methodology, offering scholars a powerful lens through which to unravel complex phenomena and construct novel theoretical frameworks. Rooted in empirical data, GT emphasizes the inductive approach of theory development, rendering it particularly attractive for aspiring doctoral researchers seeking to illuminate uncharted territories within their respective fields of study. However, while GT presents a promising avenue for generating innovative insights, the journey of crafting a doctoral thesis using this method is akin to traversing a dark forest—fraught with challenges and uncertainties that demand navigational guidance.

This paper endeavors to shed light on the universal challenges encountered by doctoral candidates who embark on the path of employing GT for their theses. Drawing from a comprehensive array of sources, including the seminal works of Glaser and Strauss (1967) and Charmaz (2006), we delve into the three main issues that consistently confront researchers regardless of their geographical location: coding, theory development and time

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constraints. As we venture through this academic terrain, we strive to provide pragmatic solutions and strategies to empower researchers and facilitate a more seamless journey.

Moreover, the nature of doctoral committees plays a pivotal role in shaping the trajectory of GT dissertations. As guardians of academic tradition, committee members wield the authority to endorse research proposals and methodologies. Nonetheless, we unveil the intricate challenges that arise when committee members lack familiarity with qualitative methodologies, particularly GT techniques. The clash of epistemological perspectives and the desire for familiarity over novelty can complicate the development of theoretical frameworks, necessitating a tactful approach to navigate these waters.

With this article, we aim to equip doctoral candidates with the requisite knowledge and tools to surmount the challenges posed by GT in their pursuit of ground-breaking research, using for this matter the knowledge available in literature. By delving into the literature, optimizing coding techniques and fostering productive collaborations with committees, researchers can effectively navigate the enigmatic terrain of GT and illuminate the academic landscape with their original contributions, and this paper seek for a better understanding of this processes. In essence, the paper seeks to answer the question: "What are the primary difficulties and obstacles faced by doctoral students when utilizing GT in their theses, and what are the potential solutions to effectively address these challenges?"

In this endeavor, our paper embodies the essence of a multilevel autoethnography, interweaving personal narratives with scholarly reflection, as advocated by Ellis (2004). Multilevel autoethnography, a distinctive genre within qualitative research, employs vignettes, reflexivity, multiple voices and introspection to immerse readers in the evolving research journey. It places a strong emphasis on the author's dynamic interaction with data, abstract analysis and pertinent literature (Ellis et al., 2015; Bochner and Ellis, 1995). Thus, this article aligns with these criteria, effectively shedding light on the challenges faced by the primary author during their doctoral journey while also revealing the ongoing shifts in perspective and identity inherent in conducting GT research while pursuing a PhD. Furthermore, it engages with subsequent experiences of both authors in supervising undergraduate, master's and doctoral theses utilizing GT. This multifaceted approach enriches our exploration of the obstacles encountered by doctoral candidates as they navigate the intricacies of the GT methodology.

In the subsequent sections, we will delve into the universal challenges of coding, theory development and time constraints, while exploring the unique dynamics of doctoral committees and the context of GT dissertations. Our intention is to demystify the GT process, empowering researchers to forge ahead with confidence and clarity as they embark on this scholarly odyssey, but before we will make a quick review about what entails using GT.

2. Understanding grounded theory and coexisting paradigms in social sciences GT is a postpositivist methodology that emerged during the "Golden Age of Rigorous Qualitative Analysis" in the United States after Second World War, pioneered by Barney Glaser and Anselm Strauss (Denzin and Lincoln, 2005; Birks and Mills, 2011). Since its seminal publication, "The Discovery of Grounded Theory" in 1967, GT has extended its application to various disciplines, including nursing, psychology, anthropology, sociology and education, among others, gaining significant recognition in social science research.

The popularity of GT has led to a substantial evolution of the approach, at times reformulating some of its foundational tenets. However, this evolution has also generated significant criticisms and tensions, resulting in controversies surrounding the conceptualization of theorizing and the outcomes of grounded theorization. Additionally, critics have raised concerns about the lack of specificity in certain aspects of the methodology, such as the researcher's positioning during the research process.

Despite this evolution, these different approaches continue to coexist under the umbrella of GT. The creators of GT, Glaser and Strauss, experienced a fierce academic split that led to claims of intellectual property and presented distinct epistemological, methodological and operational differences from each other (Dey, 2004; Eadens, 2012).

Indeed, it is crucial to explore the various positions adopted by GT researchers to gain a comprehensive understanding of the implications associated with adhering to a specific perspective. The diverse approaches within the GT paradigm offer distinct ontological, epistemological and methodological premises that shape the research process and outcomes. By examining each position, researchers can make informed decisions about the theoretical underpinnings that align with their research goals and contribute to a deeper appreciation of the implications of their chosen approach. A thorough exploration of these positions enables a more nuanced comprehension of the complexities and potential biases involved in conducting GT studies, thus fostering transparency and robustness in the research process.

2.1 First generation of grounded theorists: from unity to a rift between creators

Initially, Barney Glaser and Anselm Strauss designed GT as a response to the chaotic and unsystematic qualitative research prevalent at the time, aiming to infuse scientific rigor into the qualitative paradigm. They proposed a method that departed from the dominant paradigm, emphasizing the generation of theory directly from empirical research data, rather than relying on preconceived analytical constructs from existing literature. The GT approach sought to foster the development of entirely novel and context-specific concepts and theories based on the data under investigation. Through systematic comparison, researchers discovered codes and analytic categories that ultimately facilitated theory emergence, where the researcher was considered an "objective and distant discoverer" of the emerging themes (Charmanz, 2008; Lauridsen and Higginbottom, 2014). The GT process, as envisioned by Glaser and Strauss, is depicted in Figure 1.

As illustrated in Figure 1, the original GT methodology by Glaser and Strauss is characterized by a continuous and systematic process of data collection, coding, analysis and theoretical categorization, relying on data-driven information. Following the coding and categorization of original data, theoretical sampling is used to gather additional data, and constant comparison helps to identify emerging categories until saturation is reached, providing theoretical robustness (Hood, 2007).

In 1990, Strauss, together with Corbin, published "Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory," signaling the beginning of a division regarding the understanding and application of GT. This publication introduced detailed notions, including a modified terminology and a more systematic coding process, intended to facilitate GT research and universalize its results. Glaser, however, perceived this as a departure from the original GT approach, arguing that Strauss had altered the essence of GT. Glaser contended that GT was solely designed to explore phenomena through coding and that Strauss's approach would merely reproduce preconceived ideas and biases of those following his guidance (Glaser, 1992, 2001).

2.2 Second generation of theorists: Charmaz's constructivist grounded theory and Thornberg's informed grounded theory

The division among pioneering theorists in GT led to two distinct streams of thought and an intense debate, giving rise to new approaches in GT research. Notably, Charmaz (2006) presented the constructivist version of GT, while Thornberg (2012) introduced the informed version, among other perspectives like hermeneutic or feminist GT (Engard, 2013). Although each of these perspectives' merits individual study beyond the scope of this article, a brief

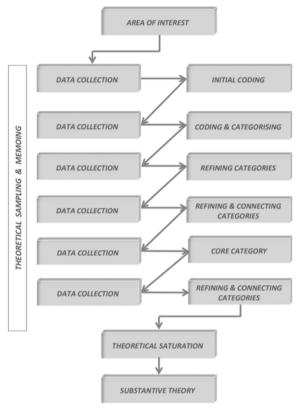


Figure 1.
Diagram illustrating the key components and workflow of the grounded theory model proposed by Glaser and Strauss

Source(s): Alvarez-Cedillo et al. (2017)

overview of most notables' positions with Charmaz's constructivist GT and Thornberg's informed GT is provided.

2.2.1 Charmaz's constructivist GT. Charmaz introduced a shift in the epistemological stance of GT, placing the role of the researcher as a co-participant in the social construction of knowledge. According to Charmaz (2017), constructivist GT assumes a relativistic epistemology, recognizing multiple perspectives, roles and realities of both the researcher and the research participants. It emphasizes reflexivity towards the researcher's background, values, actions, and relationships with research participants, situating the investigation within historical, social and situational conditions. Charmaz's constructivist approach attends to language, meanings and actions of researchers and participants alike, acknowledging the coconstruction of knowledge through a dialogical process (Charmaz, 2006).

2.2.2 Thornberg's informed GT. Thornberg approached GT with a critical perspective on the ambiguity surrounding literature review in GT research. While Glaser initially advocated avoiding literature review until the final stages of research to maintain independence from preexisting ideas, Thornberg argued that this approach could limit researchers from conducting studies within their own areas of expertise. Thornberg emphasized the importance of recognizing and acknowledging the researcher's existing knowledge and its potential influence on the research process while still adhering to the GT principles of data-driven analysis (Thornberg, 2012).

3. Challenges of using grounded theory in the investigation conducing to doctoral thesis

3.1 Coding: the rigorous path to methodological rigor

GT revolves around the coding process, a critical phase that instills methodological rigor into the entire study. Constant comparison of data, as emphasized by Glaser and Strauss (1967), is fundamental to the GT methodology, ensuring the emergence of meaningful patterns and categories. However, novice researchers often face coding challenges, complicating an already intricate process (Scott and Howell, 2008). Additionally, the researcher's epistemological approach further adds complexity, with different schools of thought advocating various GT coding types (Charmaz, 2006; Greckhamer and Koro-Ljungberg, 2005).

Due to these challenges, novices in qualitative research, including doctoral candidates, often require mentorship and support to navigate coding effectively (Scott and Howell, 2008). The lack of explicit coding guidelines in the literature exacerbates the issue, leaving researchers unsure of the best approach (Moghaddam, 2006; Wasserman *et al.*, 2009).

To address these concerns, doctoral researchers can seek assistance from experienced peers, methodologists and GT experts (Creswell and Miller, 2000). A lack of comprehensive guidance in the literature often leaves novices to navigate coding through trial and error (Moghaddam, 2006; Wasserman *et al.*, 2009). Without a clear understanding of open, axial and selective coding, doctoral candidates may struggle with data analysis, potentially missing valuable insights (Grbich, 2012). Therefore, seeking support from knowledgeable professionals can illuminate the coding path and facilitate the emergence of robust codes (Wu and Beaunae, 2014).

3.2 Theory development: simultaneous journey of insight and interpretation

The relationship between coding and theory development in GT warrants particular attention, as doctoral researchers often face time-consuming revisions due to a lack of simultaneous exploration (Glaser, 2002). Despite its crucial role, theory development remains one of the most challenging stages of a GT dissertation (Charmaz, 2006). Novice researchers may mistakenly expect a theory to naturally emerge once coding is complete (Moghaddam, 2006; Scott and Howell, 2008). However, the reality is far more complex, with researchers needing to immerse themselves in the data and interpret the connections between various coding levels and theoretical constructs (McCallin, 2003).

To facilitate smoother theory development, doctoral researchers must avoid linear approaches, allowing coding and theory to intertwine seamlessly. Early involvement in theory development can provide more time to interpret and contextualize the coding levels in relation to the overarching theory (Glaser, 2007). By understanding the iterative nature of GT, researchers can navigate the forest of theory development with greater clarity (Wu and Beaunae, 2014).

3.3 Theory development: navigating uncharted theoretical realms

For doctoral candidates utilizing GT, theory development is often the most challenging stage (Charmaz, 2006). Unlike other research paradigms, where theories might exist *a priori*, GT proposes a novel theory that emerges from the data. However, this notion can be bewildering to committees seeking familiar theoretical frameworks (McCallin, 2003). The ambiguity and fluidity of theory development necessitate a flexible and iterative approach that dynamically intertwines coding and theory construction (Glaser, 2002).

In the pursuit of constructing a GT-based theory, researchers should anticipate potential resistance from committee members seeking to impose established theories or epistemological viewpoints. Articulating the epistemological basis of GT research and

aligning it with the research design can fortify doctoral candidates' arguments in defending their groundbreaking insights (O'Connor *et al.*, 2008). Furthermore, maintaining open communication and negotiation with committee members can foster a supportive environment for innovative theorizing (Wu and Beaunae, 2014).

3.4 To use a theoretical framework or not to use it when conducting GT?

The decision to use a theoretical framework in the context of conducting GT research is a subject of contention and warrants careful consideration. Proponents of a theoretical framework argue that it can provide a solid foundation and direction for the research, aiding in data collection and analysis (Charmaz, 2006). Additionally, having a theoretical lens can help researchers frame their research questions, focus on specific aspects of the data and identify potential connections to existing literature (Suddaby, 2006). However, the challenge lies in striking a balance between adopting a theoretical framework and adhering to the essence of GT, which emphasizes the emergence of theories from the data itself (Glaser and Strauss, 1967).

On the other hand, adherents of a more purist approach to GT advocate for an initial suspension of theoretical assumptions and a focus on the raw data, allowing theories to emerge organically (Charmaz, 2005). Embracing a more open-ended exploration can lead to novel insights and unexpected connections, fostering theoretical creativity (McCallin, 2003). Nevertheless, the absence of a theoretical framework might raise concerns among committee members, particularly those who prefer more structured research designs (Kezar, 2004). As GT is subject to multiple interpretations, scholars may encounter challenges in defending their methodological choices, especially if committee members are not well-versed in qualitative methodologies (Madill *et al.*, 2005).

Thornberg's approach provides a way to navigate the complexities of GT while acknowledging the importance of theory in shaping research designs. By blending induction and abduction, researchers using this approach can strike a balance between allowing theories to emerge organically from the data and benefiting from the guidance and insights that a theoretical framework can offer. It presents a promising pathway for doctoral researchers using GT, enabling them to navigate the dark forest of GT with a more focused and purposeful direction, while still being receptive to unexpected discoveries along the way.

3.5 Time constraints: a daunting test of patience and persistence

The inherent complexity and depth of GT studies necessitate considerable time and effort, which can pose significant challenges for doctoral candidates (Dale and Volpe, 2008; Meloy, 2002). Completing a robust GT research study demands substantial time to develop research agendas, gather, analyze and code data and develop coherent theories (McCallin, 2003). Unfortunately, the time commitment required by GT may not align with the constraints faced by doctoral candidates, particularly those with limited financial support (Shortell, 1999). For prospective doctoral researchers, it is vital to comprehend the time-intensive nature of GT and plan, accordingly, ensuring adequate resources and support for a successful journey through the forest of qualitative exploration (Wu and Beaunae, 2014).

Completing a doctoral thesis using GT is a time-consuming endeavor (Dale and Volpe, 2008). The intricate process of data collection, analysis and theory development demands substantial time and resources, often exceeding what doctoral candidates can feasibly invest (McCallin, 2003). Limited financial support and academic timelines add pressure to researchers already traversing an intellectually demanding terrain (Wu and Beaunae, 2014).

To address time constraints, doctoral candidates must strike a balance between ambition and pragmatism. Realistic expectations regarding the scale of research and the level of theory development can ensure that projects remain manageable within the allotted time frame

(Glesne, 2016). Additionally, candid communication with advisors and committees regarding time limitations can lead to more supportive and constructive guidance throughout the research journey.

3.6 Theory clashes: the struggle for novelty and familiarity

The clash of epistemological perspectives within committees can lead to conflicts concerning the acceptability of emerging theories. Committee members aligned with positivist paradigms may question the validity of constructivist GT studies, perpetuating the challenge of reconciling disparate worldviews (Glaser, 2007b). Similarly, the expectation for familiar theories may pressure researchers to fit their GT findings into preexisting frameworks, obscuring the originality of their contributions (McCallin, 2003; Wu and Beaunae, 2014).

Fostering an open dialogue with committee members and articulating the theoretical underpinnings of GT can guide researchers toward constructive resolution, shedding light on the forest of theoretical synthesis.

4. Approaching the finish line: sharing a personal journey with grounded theory

As we approach the conclusion of this manuscript, we stand on the verge of comprehending the intricate process of conducting a doctoral thesis using GT. We've navigated the challenging landscape of GT methodology, delving into the realms of coding, theory development, time constraints and the intricacies of working within doctoral committees. Now, it is necessary to embark ourselves on the final stretch of our exploration, where we consolidate our insights and offer a more personal perspective to those who will follow in our footsteps. This concluding section aims to illuminate the lessons learned and chart a course toward a more informed and successful GT-based doctoral research endeavor.

In a style akin to an epistolary narrative, this section unfolds the journey of the primary author during their doctoral pursuit at the University of Granada, Spain. It illuminates the challenges faced and the strategic choices made, with the aim of offering a more personal and relatable guide to novice doctoral candidates embarking on a similar academic path.

One of the initial hurdles was the challenge of finding a position within the multifaceted realm of GT. This difficulty was compounded by the lack of prior experience with GT, as well as the complexities of participating in a broader European research project alongside the second author of this manuscript. While collaboration with senior researchers facilitated extensive discussions and provided a glimpse into the thesis defense process, it was not without its share of obstacles.

Accessing pertinent texts in the Spanish language emerged as a primary challenge, demanding additional effort. Furthermore, the task of designing a thesis firmly grounded in GT, complete with a theoretical framework, posed another significant obstacle. This challenge was overcome by incorporating an informed framework drawn from constructivist GT as expounded upon in this paper.

In addition, the doctoral program in the University of Granada mandated a publication associated with the thesis for its defense. As an emerging researcher, this necessitated grappling with the complexities of publishing qualitative research employing GT in a scientific journal. The challenge lay in justifying the study's validity to scientists unfamiliar with the methodology. To address this, a deliberate emphasis was placed on elucidating the construction of categories, achieving saturation, explaining the chosen approach and providing graphical representations and flowcharts of the process. These efforts aimed to ensure that even readers less acquainted with the methodology could appreciate the rigor of the process.

Amid these challenges, there were moments when the impostor syndrome, the feeling of "not knowing enough to conduct GT," crept in—a persistent doubt that plagues many researchers throughout their academic journey. It's crucial to acknowledge that these feelings are not unusual or unique. This manuscript serves as a personal testament that we all encounter such moments of self-doubt, and that the struggles we've described are part of a shared experience. Impostor syndrome can indeed make you question your abilities, but it's essential to remember that you are not alone in facing these challenges. As you navigate the academic realm, you will often find peers or senior academics who can provide guidance and support as you navigate your thesis journey.

Ultimately, to end on a positive note, the main author successfully defended their thesis. While questions did arise about GT during the defense, it was applauded how much detail was provided in the methodology description. This accomplishment highlights the value of thorough documentation and understanding the chosen research methodology.

Since the inception of their journey with GT through the aforementioned project and thesis, both authors have guided undergraduate, master's and doctoral these employing this methodology. It became apparent that many of the challenges described are recurrent for novice researchers. In the spirit of illuminating the path for others, this document is presented not only to share personal experiences but also to incorporate relevant literature that may assist and underpin the future research endeavors of those who engage with it.

5. Conclusion

This article has undertaken a comprehensive exploration of the challenges faced by doctoral candidates employing GT in their theses. GT, as a qualitative methodology, offers a powerful lens to unravel complex phenomena and construct novel theoretical frameworks. However, traversing the path of GT can be likened to navigating a dark forest, fraught with challenges and uncertainties. The universal challenges identified in this paper encompass coding, theory development and time constraints, each presenting unique obstacles to the researcher's journey.

Coding, a fundamental aspect of GT, demands methodological rigor and constant comparison to derive meaningful patterns and categories. Novice researchers often struggle with coding, necessitating mentorship and guidance. The iterative nature of theory development, intertwined with coding, poses another challenge. Researchers must understand that theory does not naturally emerge from coding and that early involvement in theory development is crucial for a successful GT dissertation. Moreover, the clash between the novelty of GT and the desire for familiarity within doctoral committees presents further challenges. Researchers must navigate the expectations of committee members with different epistemological perspectives and advocate for the theoretical underpinnings of GT research. Time constraints serve as a daunting test of patience and persistence for doctoral candidates using GT. The time-intensive nature of GT research, coupled with limited resources, can strain research timelines and ambitions.

To overcome these challenges, this paper advocates seeking support from experienced peers and methodologists (recognizing the potential of communities of learning within academia can greatly enhance the research process), fostering open communication with committees and striking a balance between ambition and pragmatism. Additionally, exploring the coexisting paradigms within GT provides a nuanced understanding of its implications, aiding researchers in making informed decisions aligning with their research goals.

In conclusion, this article illuminates the path of GT for doctoral candidates, offering pragmatic solutions and strategies to empower researchers on their scholarly odyssey. By acknowledging and addressing these challenges, researchers can effectively navigate the

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Further reading

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