Journal of Management Inquiry
2019, Vol. 28(2) 228–245

DOI: 10.1177/1056492618770743
journals.sagepub.com/home/jmi
SAGE

Grounded Theory in Practice: Novice Researchers' Choice Between Straussian and Glaserian

Fahad M. Alammar[1], Ali Intezari[1], Andrew Cardow[1], and David J. Pauleen[1]

Abstract

Novice researchers face challenges in applying grounded theory and choosing between its two historical approaches—Glaserian and Straussian. Although much has been discussed regarding the differences between the Glaserian and Straussian approaches, these differences can confuse early researchers, leading to the flawed use of grounded theory in management and organizational research. Using three case studies (a PhD graduate, a PhD candidate, and a PhD supervisor) in a management and organizational research context, this article illustrates these key differences and provides guidance for researchers in choosing between them. By providing examples and commentary, this article aims to help researchers to choose and apply the most appropriate form of grounded theory within the field of management and organizational research.

Keywords

grounded theory, management education, qualitative research

Introduction

Half a century after the publication of *The Discovery of Grounded Theory* (Glaser & Strauss, 1967), grounded theory has gained popularity within organizational and management research partly due to its ability to produce organizational descriptions, themes, and hypotheses that are recognized by members of organizations (Länsisalmi, Peiró, & Kivimäki, 2004). Today, it is also not uncommon for experienced and novice researchers to use grounded theory for their research to produce new theories and original research (see, for example, Boudreau & Robey, 2005; Cowling, 2015; Gligor & Holcomb, 2013; Intezari & Pauleen, 2017; Poisseroux, 2010; Schurch, 2015; Xiao, Dahya, & Lin, 2004).

However, researchers are often confronted with the challenge of using and applying grounded theory or choosing between its various versions (Glaser, 2014). Although much has been discussed regarding the differences between the Glaserian and Straussian approaches, these common differences may still confuse novice researchers when they choose between the two approaches. Furthermore, there are other challenges identified that are usually overlooked or less emphasized in the grounded theory literature. In addition, few grounded theory researchers write about their experiences in and motivation for choosing and doing a grounded theory study (Glaser, 2009).

As a result, novice researchers are often confronted with the challenge of using and applying grounded theory and/or choosing between its various versions (Glaser, 2014). PhD and novice researchers are encouraged to develop fresh theories in management and organizational research in general (El Hussein, Kennedy, & Oliver, 2017), yet they may lack the skills and the practical experience to develop and write new theories, leading to producing nontheoretical work (Abrahamson, 2008).

This article bridges this gap by providing firsthand experience of grounded theory in practice by presenting two PhD case studies and a PhD supervisor's case study. More significantly, this article helps in identifying key challenges in the literature that are often neglected. The purpose of this article is to illustrate some of the challenges and choices involved in conducting grounded theory. The aim is to help researchers make an informed decision in choosing between the two approaches and successfully complete a grounded theory study, which should contribute to better management and organizational research outcomes.

The discussion below focuses on two divergent grounded theory approaches—Glaserian and Straussian—as well as a constructivist version of grounded theory. To do this, we

[1]Massey University, Auckland, New Zealand

Corresponding Author:
Fahad Alammar, School of Management, Massey University, Private Bag 102904, North Shore, Auckland 0745, New Zealand.
Email: F.Alammar@massey.ac.nz

have reviewed Glaser and Strauss's original book, *The Discovery of Grounded Theory*, and their subsequent publications. Taking the relevant literature into consideration, we present grounded theory and its challenges from the perspectives of a recent PhD graduate, a near completion PhD candidate, and an experienced supervisor of grounded theory PhD students.

In this article, we first review the grounded theory literature by providing background and a discussion of the points of divergence between the Glaserian and the Straussian approaches. Next, we present two PhD case studies to illustrate some of the challenges and issues concerning grounded theory that were encountered. This is followed by a supervisor's case study within the management field explaining some of the challenges and implications of grounded theory at the supervisory level. Based on the case studies, we identify and discuss strategies for approaching four key challenges that we believe can assist in making an informed decision between the two approaches and to better execute a grounded theory study. At the end of the article, the limitations and future research suggested by the study are presented followed by the conclusion.

Literature Review

Background

Research during early decades of the 20th century was dominated by either scientific quantitative research, or by qualitative research that was most concerned with either verifying existing theories or presenting an unintegrated theory (Glaser & Strauss, 1967). The idea of "grand theory," such as Weber's theory of bureaucracy and Durkheim's theory of suicide, was influential at that time, and the focus of research was on improving the methodology for verifying existing grand theories (Glaser & Strauss, 1967). This is highlighted by Oktay (2012), who, having completed her PhD in 1974, commented that "at that time, 'research' meant survey research. Qualitative research was not on the radar" (pp. vii-viii).

In 1967, Barney Glaser and Anselm Strauss wanted to improve upon the extant methods for discovering a theory. In the publication of their jointly authored book *The Discovery of Grounded Theory: Strategies for Qualitative Research* (1967), they defined grounded theory as "the discovery of theory from data—systematically obtained and analyzed in social research" (p. 1). They argued that systematic qualitative analysis has its own logic and can produce new theories grounded in the field data. Glaser and Strauss, therefore, moved from verification to generation in qualitative research, and urged grounded theorists to develop fresh theories, to let data guide them and to engage in data collection, coding, and analysis simultaneously (Glaser & Strauss, 1967).

Grounded theory, therefore, was introduced at the time as a unique inductive method that aims to generate empirical theory in a substantive area grounded in the data. It was considered unique because, apart from its emphasis on theory development, the theory evolves through a process as a result of interplay between data collection and data analysis, and continues in an ongoing cycle based on the concepts derived from the data (Corbin & Strauss, 2008; Goulding, 2002). This means that "most hypotheses and concepts not only come from the data, but are systematically worked out in relation to the data during the course of the research" (Glaser & Strauss, 1967, p. 6).

The Divergence

Although Glaser and Strauss (1967) coauthored the original book on grounded theory, *The Discovery of Grounded Theory*, the two authors diverged in their views on and approaches to grounded theory and consequently published separately. This divergence came after Strauss coauthored a book with Corbin, titled *Basics of Qualitative Research: Grounded Theory Procedures and Techniques* (1990). Consequently, Glaser (1992) published his book, *Basics of Grounded Theory Analysis: Emergence vs. Forcing*, in which Glaser very explicitly highlighted the differences between what he considers as the original, or classical, grounded theory, and Strauss and Corbin's approach (Straussian). In general, Glaser contends that Strauss and Corbin's procedures force data and analysis into preconceived categories, which strangles the emergent theory, or as Glaser puts it, forces it (Glaser, 1992). On the contrary, Strauss and Corbin (1990) believe that the lack of structured design in the original grounded theory made it difficult to know how to make sense of data and develop a theory.

Although much has been written about the differences between the Glaserian and the Straussian approaches, these differences often revolve around their philosophical positions, their use of the literature, and their coding procedures (Birks & Mills, 2011; El Hussein et al., 2017; Heath & Cowley, 2004; Jones & Noble, 2007; Kenny & Fourie, 2015; Locke, 1996; Suddaby, 2006; Tan, 2014; Urquhart & Fernandez, 2006). Charmaz (2000) characterizes both approaches' philosophical positions as holding "a realist ontology and positivist epistemology, albeit with some sharp differences" (p. 513). However, as will be discussed (see Case Study 2), their philosophical positions are still largely disputed and different authors have come up with different conclusions (Urquhart, 2013). Because of their supposed philosophical differences, the Glaserian and the Straussian approaches differ in the use of literature. The Glaserian approach strongly advises against consulting the relevant literature in the substantive area prior to, or during the process of, undertaking a grounded theory study to eliminate any prior influence (Glaser, 1992). The Straussian approach, however, allows the appropriate use of the literature at every stage of the study, but not all the literature (Corbin & Strauss,

2008). In the coding procedures, the Glaserian approach employs more explicit yet relaxed techniques (substantive coding—which consists of open and selective coding—and theoretical coding) to allow for the natural emergence of a theory (Glaser, 1978). In contrast, the Straussian approach embodies more structured coding procedures (open, axial, selective coding, and a conditional matrix or diagram) to create a theory (Strauss & Corbin, 1990).

Despite these differences, the two approaches share fundamental characteristics, namely: theoretical sampling, theoretical saturation, constant comparative analysis, memoing, and developing a theory (Birks & Mills, 2011; Glaser, 1992; Oktay, 2012; Strauss & Corbin, 1990). These characteristics are extensively explained and discussed in the grounded theory literature (Charmaz, 2006; Corbin & Strauss, 2008; Goulding, 2002; Urquhart, 2013).

Common Differences Between the Glaserian and the Straussian Approaches

Within the grounded theory literature, the differences between the Glaserian and the Straussian approaches are often characterized by the differences in their philosophical positions, the use of literature reviews, and the coding procedures (see, for example, Birks & Mills, 2011; Jones & Noble, 2007; Kenny & Fourie, 2015; Urquhart & Fernandez, 2006). While these differences are evident and significant, for PhD and novice researchers, they may still be obscure when deciding upon the best choice of approach. The below paragraphs discuss these differences, which are evident in the case studies discussed later in the article.

In qualitative research, the philosophical position of a researcher plays an important role in formulating the research question and can have an impact on what methodology they choose. The research question is somewhat dependent on the researcher's "worldview": that is, their view on the nature of reality and knowledge (Annells, 1996). Urquhart (2002) holds that if it is true that grounded theory has an inherited philosophical position, then this might prevent a researcher with an opposing paradigm from using it.

However, the philosophical position of both approaches is still largely debatable and not firmly established. People have debated whether grounded theory, in both the Glaserian and the Straussian approaches, is inherently positivist, postpositivist, or interpretivist, among other positions (Annells, 1996; Bryant, 2002; Charmaz, 2011a, 2011b; Madill, Jordan, & Shirley, 2000). Others see grounded theory as a method and not a methodology and, therefore, independent of any philosophical position (Urquhart, 2013). Charmaz (2000), on the contrary, concluded that "both endorse a realist ontology and positivist epistemology, albeit with some sharp differences" (p. 513). These disparities are partly due to the continuing philosophical shift of both approaches and, more significantly, to the simple fact that the founders of grounded theory never made a clear philosophical claim (Urquhart & Fernandez, 2006). Holton (2008), who coauthored with Glaser, asserts that "Glaser rejects the neat divide between positivist and interpretivist paradigms claiming that grounded theory is neutral and as issues free as research can get" (para. 5).

Therefore, we echo the position of Holton (2008), Urquhart (2002), and Charmaz (2006) that grounded theory can be neutral and used regardless of the researcher's philosophical position. Grounded theory can be seen as a container in which any content can be poured; however, the way in which grounded theory is used is not neutral (Charmaz, 2006). For PhD and novice researchers then, the underlying philosophical position of both approaches need not be an obstacle to undertaking grounded theory. As will be shown in Case Study 2, a researcher with either a positivist or an interpretivist approach can pick either approach and still not violate the basic tenets of grounded theory. How they use grounded theory in their research is subject to their own philosophical views.

Reviewing the literature before starting cannot wholly determine the use of one approach or the other, as a literature review is now conditionally accepted by some grounded theorists of both approaches (Charmaz, 2006; Martin, 2006; Nathaniel, 2006; Urquhart & Fernandez, 2006). For PhD students, conducting a literature review is a necessary step to satisfy university procedures and to find an area of interest and justify it. Normally, students conduct a literature review in a general area of interest and then focus on a particular area (i.e., substantive area) as they progress. Out of this literature review, the main area of research emerges. By then, the students will have been immersed in the related and unrelated literature under study. As discussed in Case Study 1, only at this stage will the methodology be chosen to accommodate the emergent area of interest.

In Case Study 1, a grounded theory study was inspired by the lack of theory and knowledge in the area chosen. The literature review, therefore, was essential (not to mention mandatory) to show that the chosen methodology, grounded theory, was justified, and that the findings would contribute to the literature. All of this was done while being aware that only the generated categories and theory would determine the research road. "The trick is to use [the literature] without letting it stifle your creativity or strangle your theory" (Charmaz, 2006, p. 166) and to set this literature review "aside—bracketed—prior to the emergence of the core category during the primary research" (Thistoll, Hooper, & Pauleen, 2016, p. 632). This is not a distortion of Glaser and Strauss's (1967) original stance on doing a literature review; rather, it is a clarification of what they originally intended, which was to avoid imposing preconceived ideas onto one's work. Therefore, novice researchers can undertake a noncommittal literature review prior to collecting the data without violating the rules of grounded theory, and at the same

time satisfy university procedures and supervisors' expectations of conducting a substantial literature review prior to beginning data collection and analysis.

Choosing from the differing coding procedures espoused by the Glaserian and the Straussian approaches can be difficult at the start of a study, as most novice researchers will not encounter this issue until halfway through the research. In particular, they will only encounter the coding issue after the first phase of data collection has been conducted and data analysis begins. Only at this point, when they begin to experience coding, do they realize that they need to be aware of the coding procedures of both approaches. In the Glaserian approach, after open coding, the researcher starts selective coding in which open coding is delimited and coding becomes focused only on the key variables to the core category (Glaser & Holton, 2007). A core variable is discovered by this stage and any hypothesis or relationships should emerge from the data; there is no attempt to test preconceived relationships or hypotheses. Accordingly, "most hypotheses and concepts not only come from the data, but are systematically worked out in relation to the data during the course of the research" (Glaser & Holton, 2007, p. 56).

In the Straussian approach, however, after open coding, the researcher starts axial coding where data are put back together in new ways by coding around the axis, making connections between categories, and by utilizing diagrams and mapping (Corbin & Strauss, 1990). At this stage, hypotheses and relationships can be deductively proposed and tested against data and categories. According to Corbin and Strauss (1990), during this analytic process, "all hypothetical relationships proposed deductively during axial coding must be considered provisional until verified repeatedly against incoming data" (p. 13).

Table 1 summarizes all the differences regarding philosophical position, literature review, and coding procedures.

Table 1. Glaserian and Straussian Approaches to Different Issues in Grounded Theory.

	Glaserian approach	Straussian approach
Philosophical position	Neutral	Neutral
Literature review	Exhaustive—No	Exhaustive—No
(In the substantive area)	Partial—No	Partial—Yes
Coding procedures	Open, selective, theoretical	Open, axial, selective, diagrams

PhD Case Studies

In the following sections, we use two PhD case studies and one supervisor's case study, within the organizational and management research context, to demonstrate some of the challenges and issues faced while conducting research, including PhD studies. The first case study uses the perspective of a near completion PhD candidate to illustrate some practical issues and examples that researchers should consider before choosing and using grounded theory. The second is a case study of a recent PhD graduate explaining three intellectual challenges that new researchers may encounter when using grounded theory. The third case study gives the perspective of a PhD supervisor on the challenges and implications of grounded theory at the supervisory level. These three cases will also serve as a foundation and primary source in the discussion for the remainder of the article.

We would like to emphasize that the case studies were written at different stages and by different authors, hence their emphasis on different elements and purposes. Our intention in including these case studies was to reflect on the authors' different experiences rather than specifically comparing the case studies. The case studies were written in the first-person voice to reflect the personal experience of the writers.

Case Study 1: The Theory of Business Diplomacy in Practice

In my ongoing PhD study in management, the Straussian grounded theory approach was used to investigate the emerging field of business diplomacy and its related elements. The aim of the study was to enhance current scholarly understanding of the still nascent field of business diplomacy within organizations and to develop a substantive theory in the field that may potentially benefit both academics and practitioners.

Using theoretical sampling, 21 diplomats, CEOs, and business people were interviewed and asked about their understanding and interpretation of business diplomacy. The data were collected and analyzed in a multistage process over five phases, with data collection and analysis occurring at the same time. The data were analyzed using Corbin and Strauss's (2008) three coding strategies: open, axial, and selective coding. Following the Straussian approach in data analysis, I constantly compared incidents and categories iteratively for similarities and differences to categorize the data (Strauss & Corbin, 1998). When theoretical saturation was reached in Phase 5, and before finalizing the theory, member checking was conducted where the findings were returned to the participants who were asked whether they felt they had been fairly represented and to add further comments. Theoretical saturation is achieved, not only when no new data are emerging but also when all the concepts are well defined and descriptively dense (Corbin & Strauss, 2008). The findings led to a provisional theory that explains business diplomacy in practice and can help businesses incorporate practical diplomacy into their local and global operations.

While grounded theory offers a well-structured way to empirically develop a theory grounded in the data, there are

issues that should be considered before using it, especially for novice PhD students. Even though there are many, I will focus on the main issues that I found relevant and critical to PhD students and to the discussion presented throughout this article.

Research problem. At the beginning of my PhD, the research problem was not discovered or "stumbled on" during data collection and analysis as advocated by the Glaserian approach (Glaser, 1992). As part of the PhD requirements, the research problem was chosen beforehand and presented in an official PhD proposal that was defended to a school committee (PhD candidates who do not have to attend a PhD confirmation or submit a proposal may find the issue of finding a research problem or question confusing if they are new to grounded theory). Despite keeping an open mind regarding the two approaches, I soon realized, during my ongoing reading in the grounded theory literature, that the Straussian approach offered me more flexibility regarding the research problem. In the Straussian approach, the research problem does not have to be emergent or discovered during data collection, but it can be a predetermined research problem that is derived from the relevant literature or in consultation with supervisors (Corbin & Strauss, 2008). In the case of this research, the research problem was derived from a preliminary literature review that was both necessary to find a research problem and a mandatory university procedure. Out of this literature review, the main research problem was discovered and the literature review was used to justify the need to conduct further research. If I only had a general interest or "wonderment" regarding "business diplomacy" without any particular problem, then the Glaserian approach would have been a suitable option.

Research question. The other issue that I encountered during my PhD research is the development of the main research question. While grounded theory gives the researcher the freedom to revise the research question during the research, the Straussian approach provided me with the freedom to choose the design and the structure of the research question. Just like the research problem, the research question must be explicitly stated in the PhD proposal before data collection and analysis. While grounded theory and universities' requirements generally permit students to revise their main research question as they progress, in my case, the research question was focused and remained relatively unchanged throughout the research. This aligned my PhD research design with the Straussian approach, which allows for more a specific and focused research question (Strauss & Corbin, 1990). If I had an open and broad research question that became narrower as I collected and analyzed the data, the Glaserian approach would have been chosen.

Research interview questions. At the start of my PhD, and before choosing a particular grounded theory approach, I had a set of preconceived and semistructured interview questions to ask participants. Although the number and the design of some of the interview questions changed over the course of conducting interviews based on the emerging concepts and categories, the main interview questions remained intact. As I read more in grounded theory, I realized that the Glaserian approach encourages unstructured interview questions that become structured and focused following the initial round of interviews. In the Glaserian approach, the interview questions simply emerge during interviews and relate directly to what the interview is about empirically (Glaser, 1992). Therefore, because I had a semidesigned interview guide, I opted for the Straussian approach, which allows for semistructured interview questions (Corbin & Strauss, 2015). One possible consequence of using semistructured interview questions in the Straussian approach is that the researcher may not truly capture the main concern of a population.

Theoretical sampling. Sampling in this research was both theoretical and purposeful in that I looked for participants who could provide rich and relevant information on the subject matter based on the emerging concepts. In grounded theory, the researcher cannot plan in advance where to collect data and who to interview. Instead, the researcher uses theoretical sampling in which where and what data to collect next is based on the emerging concepts and categories (Glaser & Strauss, 1967). In the case of this research, as I began coding the first phase of interviews from the pilot study (Phase 1), I started to apply theoretical sampling to seek further data and validate the emerging concepts and categories. In doing so, I engaged in data collection, analysis, and interpretation simultaneously with emerging concepts informing the process of additional data collection. As advised by Glaser and Strauss (1967), the criteria for choosing the first participants in pilot studies should be based on relevance and purpose for the research. Therefore, only those with experience in diplomacy and business diplomacy were asked to participate. From there, emerging concepts from data analysis and coding informed the direction for further data collection.

The process of theoretical sampling also proved to be useful for this research in other ways. As experts who are considered knowledgeable representatives of business diplomacy are not precisely identified, theoretical sampling gave me the flexibility to include more professions based on participants' suggestions. For example, a few participants indicated that internationalization managers and government commercial diplomats could provide some insights regarding business diplomacy. Therefore, they were contacted and included in subsequent phases of data collection.

Open coding. Coding in this research was conducted using Corbin and Strauss's (2008) three coding strategies: open, axial, and selective coding. After gaining initial familiarity with the transcripts, I openly coded each line, sentence, or

paragraph where relevant and appropriate (see Appendix A for an example of line-by-line coding). As suggested by Corbin and Strauss (1990), I gave a group of incidents a conceptual label, that is, a code. I also used a clustering technique to give me a visual and flexible way to understand and organize my data. In clustering, data are organized in clusters, or categories, and are considered provisional until more data arrive to give the researcher the freedom to map his or her data at an early stage (Charmaz, 2006; Strauss & Corbin, 1990). As suggested by Corbin and Strauss (2008), I constantly asked myself the following questions during coding and categorization to help me better understand the data and remove any mental blockages:

- What is going on here?
- What is the relationship of one concept to another?
- Which concepts are well developed and which are not?

In open coding, if enough incidents support a category, then these incidents should be grouped together in a category to account for their frequent occurrence and relevance (Strauss & Corbin, 1990). During open coding, there were instances where it was difficult to assign a code to a comment or create a conceptual name for a category. In those cases, I used participants' actual words (in vivo coding), used my own knowledge and experience, and consulted with my supervisors and colleagues.

Not all categories emerged during open coding; other categories only emerged during axial coding.

Axial coding. Once categories and their subcategories began to accumulate, open coding was delimited. Axial coding begins when categories become apparent and evident (Corbin & Strauss, 1990). Nonetheless, further development of categories can take place during axial coding as well by coding on or by joining different subcategories together to form a category. However, the analysis became focused only on coding for the developed categories. In doing this, I began "to build up a dense texture of relationships around the 'axis' of the category being focused upon" (Strauss, 1987, p. 64). If a category failed to have an adequate basis, then it was either merged with a similar category, or discarded altogether. For example, during axial coding, there were instances where major categories were merged together to form one category as they share clear similarities. This Straussian systematic and intense method of coding and relating categories together allowed me to seek categories in the data. As a result, categories became refined, elaborated, and integrated, making them more suitable for building up a theory. Appendix B uses an example to illustrate how subcategories and categories were strategically reassembled and organized during axial coding and after the initial coding process. It is important to note that some of the subcategories and categories in this research did emerge during open coding. Open and axial coding are not separate stages; they go hand in hand in grounded theory (Corbin & Strauss, 2008).

Selective coding. Once categories started to solidify, I began to contextualize and hypothesize the interrelationships of categories and their subcategories. This is where axial coding was delimited and selective coding began. Selective coding is where all categories are unified around a core category (Corbin & Strauss, 2008). During this process of theorizing, I used subcore categories to provide some theoretical coverage for the research. The idea of using subcore categories was suggested by Glaser (1978) when the researcher is confronted with choosing among equally qualified core categories. In this research, I felt that favoring only one core category meant leaving out other equal and essential core categories. In total, I had four subcore categories that linked all categories together. Appendix C provides an example of how one subcore category emerged in selective coding. To discover the core phenomenon of this research and the main theory that explains what the research is about, I asked myself: What is the main idea presented in this research? If I can conceptualize my findings, what do I say? What do these actions and interactions seem to be about? (Corbin & Strauss, 1990).

Choosing a core category proved to be a challenging task. Researchers might find themselves confronted with choosing among several core categories. However, as advised by Strauss and Corbin (1990), I continued to play and struggle with the data and the problem of integration to see which core category captured the essence of what the research is all about. In some cases, I consulted with my supervisors regularly during theorization of the core category. Whenever necessary, I gave myself space and a break to remove any mental blockages.

Taking the overall picture of categories and subcore categories and their interrelationships, I constantly compared all categories, moved them around, merged, revised, and refined them in the best way I thought would fit the data to help explain the core phenomenon under study. As a result of this iterative process, I was able to build up a larger theoretical scheme, that is, a core category.

Substantive theory versus formal theory. Substantive theory is a theory developed in a substantive area of research such as professional education or small businesses. However, a formal theory is a theory developed in a more general and formal area of inquiry such as formal organizations (Strauss, 1987). To move from a substantive theory to a formal theory that has a higher level of generality, theoretical sampling and analysis should be done in different kinds of substantive areas and cases to account for more contingencies and interactions. In this case study, the theory developed, or the core category, is a substantive theory in the area of business diplomacy with participants mainly from diplomatic and business

relations backgrounds. In this sense, the theory developed is local or substantive and not a formal theory, and, therefore, does not have the level of generality and applicability that a formal theory has.

To increase the possibility of generalizability, and as suggested by Glaser and Strauss (1967), a researcher might use the concepts and theory already developed in a substantive area to do further research in multiple areas, thus increasing the theory's generalizability. Such a process will move the theory developed from a substantive theory to a middle-range theory or formal theory.

Computer-based coding versus paper-based coding. The researcher has to make a decision on whether to hand-code printed interview transcripts, use flip-charts, and Post-it notes, or use computer-assisted software for data analysis. In the case of this research, all audio interviews were transcribed by the researcher and moved into Quirkos™ software for data analysis and coding throughout the process to expedite the process and manage codes and categories and their relationships. At the beginning, QSR NVivo™ software was used as a popular and available program for qualitative data analysis. At the end of Phase 2, I switched to Quirkos™ software for qualitative analysis. Therefore, I had to recode some interviews as codes were not transferable between the two programs.

Quirkos™ is a new program launched in late 2014; it is now used in more than 50 organizations around the world. The reason for switching to Quirkos™ is that it offers a more visual, colorful, and engaging experience with what I believe to be similar benefits and features of NVivo™. Quirkos™ displays a visual model that illustrates your codes and categories as you code. Codes and categories are displayed as bubbles that get bigger as you feed them with comments and can be dragged around and linked together where relevant (see Appendix D for an actual example). Quirkos™ also provided me with the ability to see my progress, to search, and, more significantly, to print out reports and outputs on which I could continue coding (see Appendix E). Also, the software helped me experiment with the data, keep them all in one place, and start again from scratch (recoding), while comparing them with a click on a button. The Quirkos™ website features different blogs that discuss grounded theory and the use of the Quirkos™ software in grounded theory and how it supports the iterative approach (Turner, 2014, 2016)

While it may be argued that computer-aided data analysis may lead to overcodifying and mechanical analysis (as is the case with Case Study 2), in the case of this research it did not. This is because Quirkos™ mimics the paper-based analysis process in that it enables the researchers to print the coded transcript and view it, which keeps the researcher closer to the data as shown in Appendix E.

Quirkos™ provided me with the visual connection of data and categories. This came in handy during axial coding, which requires the researcher to generate hypotheses and link categories together. Having a visual display of all categories and subcategories allowed me to contextualize related categories while questioning the data in an effort to create a theory. Moreover, being able to visually switch between different categories and subcategories, and access the comments inside, facilitated the process of constant comparison in that I could switch between categories (bubbles) and compare their comments and incidents for any irregularities. Constant comparison is the process of comparing an incident with another incident and categories with other categories for similarities and differences to classify the data. Finally, the ability to print reports of all my codes and categories allowed me to maintain a fresh perspective on the data and brought me closer to it, which facilitated theory creation.

Despite these issues, using grounded theory is a learning curve and one that will provide an intellectual transformation experience that will potentially benefit the researcher for years to come. Based on my experience, I suggest that novice researchers conduct a careful exploration of the different methods available, including grounded theory, while considering the nature of their research and its goal before they start their research. The Straussian grounded theory approach was not knowingly chosen at the beginning of this PhD case study but instead was found at a later stage to be suitable through the process of formulating the research question, as well as data collection and analysis. Although the Glaserian grounded theory approach is well articulated and allows for the natural emergence of a theory, it was not used as it did not fit with the design of this particular PhD study.

Case Study 2: The Theory of Wise Management Decision Making

In my completed PhD study in the organizations and management discipline, Glaserian grounded theory was used to examine an emerging field, organizational wisdom (Intezari, 2014). The study was designed to develop a theory of the relationship between wisdom and managerial decision making. A total of 37 CEOs and senior executives were recruited from a diverse range of organizations and fields from both the private and public sectors for interview. The data were collected and analyzed over five phases, with an average of just over seven interviews in each phase. As there is no limit set on the number of informants needed to begin a grounded theory study (Cutcliffe, 2000), data analysis began with the data from the first four informants. I also ensured diversity of participants in terms of gender, age, work experience, professional field, and education. The findings led to a theory of wise management decision making that explains how managers can incorporate wisdom into their managerial decisions (Intezari, 2014).

While grounded theory offers a systematic approach that facilitates a dialectical interaction between the field data and

the emerging theory, I found that conducting a grounded theory study may raise some challenges for the researchers who are new to grounded theory. The grounded theory, study of wise management decision making, presented significant intellectual challenges. The challenges are categorized into three main groups: philosophical, theoretical, and methodological. While these challenges have been identified based on the researcher's experience in implementing grounded theory, the challenges have been reported by other scholars too.

From a philosophical perspective, the most significant challenge that the researcher may encounter when conducting a grounded theory study is the ambiguity around the ontological stance of grounded theory. While some might argue that positivist epistemology is implicit in the grounded theory methodology as proposed in *The Discovery of Grounded Theory* (Glaser & Strauss, 1967), Strauss and Corbin's (1998) stance is that the researcher's grasp of an external objective reality is limited and hardly irrefutable. This stance is also reflected by Glaser (2002) as he concedes that the analyst is human and their personal biases and interpretations may inevitably and unintentionally influence the research. The process of coding is inevitably subjective (Urquhart, 2002), which leads the researcher to have interpretative influence when generating a grounded theory (Kenny & Fourie, 2015). In this sense, knowledge is experiential, and the object (in this case, the meaning of the participants' articulation of their experience and observation about the subject under study) does not have observable and measurable patterns and regularities (Cunliffe, 2011). To guarantee the discovery and emergence of theory, while admitting the interpretive influence in the process of grounded theory, Glaser (2003) unequivocally asserts that it is the participant's perspective that is paramount in refining the researcher's abstractions. This, however, further becomes a challenge for a new grounded theory researcher to understand what epistemological assumptions underlie grounded theory, when Glaser, elsewhere (cf. Glaser, 2003, 1998), characterizes grounded theory as a neutral stance between positivist and interpretivist paradigms, claiming that the border between positivist and interpretivist paradigms is blurred.

Nonetheless, it is clear, compared with Strauss and Charmaz, that Glaser stays true to the fundamental tenet of grounded theory: that is, an inductive emergence of theory. The inductive generation of theory is achieved through comparative analysis that "subsumes and assumes verification and accurate description, but only to the extent that the latter are in the services of generation" (Glaser & Strauss, 1967, p. 28). While the data are allowed to speak for themselves, the researcher's creativity and imagination are recorded in memos (Heath & Cowley, 2004). Corbin and Strauss (2008) define memos as "lengthier and more [in-]depth thoughts about an event, usually written in a conceptual form after leaving the field" [*sic*] (p. 124). The researcher's ideas about and understanding of the data must be verified by all data (Glaser, 1978). While the Glaserian grounded theory is more concerned with a discovery of what exists in the data, the grounded theory suggested by Strauss and Corbin is more interested in what might be in the data. In the latter, the analysis is more deductive as the researcher looks for verification in the data for his or her preconceived ideas. Strauss and Corbin (1998) argue that the theory is developed through deductive–inductive verification analysis. That is, the researcher's ideas are inductively elaborated and validated by the data (Strauss & Corbin, 1998).

It is very difficult to draw a distinct boundary around the philosophical stance of grounded theory. Despite Glaser's effort to clarify the ontological stance of the methodology, it will be very difficult for new grounded theory researchers to justify why their data collection and analysis have not been exposed to a constructivist position. The ambiguity around the issue is exacerbated when the second generation of grounded theory methodologists, such as Charmaz (2011a, 2011b), more decisively emphasize that the grounded theory draws on a social constructivist approach and lies in the interpretive tradition. It is interpretive as the researcher cannot replicate the experiences of the research participants. Charmaz (2006) treats grounded theorizing as a social action that the researcher constructs in a particular place and time. She emphasizes that it is not just the participants, but also others including institutional committees, colleagues, students, teachers, and untold others who may live in the researcher's mind and influence how the researcher conducts his or her study for a while after the researcher's immediate contact with them.

While the philosophical challenges surfaced in the later stages of the study, the theoretical concern emerged during the early stages of the research project. The issue was rooted in the diversity of the approaches to grounded theory as well as the inconsistent terminology, which raised challenges. The theoretical issue may lead to a level of uncertainty and disappointment for the researcher (to the extent of possibly giving up on using grounded theory) when the researcher realizes that the cofounders of grounded theory took different routes right after introducing grounded theory in their collaborative work, *The Discovery of Grounded Theory* (Glaser & Strauss, 1967). The two major variants of grounded theory have been extensively discussed elsewhere in this article.

The third challenge is methodological and can be further divided into three categories: the nature of the study, coding procedures, and computer-aided analysis. The first methodological challenge is related to whether grounded theory should be considered a quantitative or qualitative methodology. Glaser (2008) argues that grounded theory falls neither into the qualitative category nor into the quantitative. The classic grounded theory borrows from both qualitative and quantitative methods, while not being either of them (Glaser,

1998, 2008).[1] While the methodology is widely recognized and used as a qualitative methodology (Charmaz, 2006; Strauss & Corbin, 1990), grounded theory is considered by the classical grounded theory advocates to be a unique methodology that holds a middle territory between the qualitative and quantitative approaches. Grounded theory adopts "reasonable and limited rather than absolute features of both and [is] offering an alternative that is of greatest practical use because it solidly grounds explanatory theory in data and provides [a] theoretical foothold for effective actions and change initiatives" (Simmons, 2011, p. 27).

The second methodological challenge is concerned with coding procedures. In the classic grounded theory, the coding procedure consists of substantive coding (including open coding and selective coding) and theoretical coding (Holton, 2007). It could be confusing, as happened in my case, that theoretical coding conflicts with the classic grounded theory principle of the natural emergence of the theory. Although Glaser's publications and his publications with others, such as Glaser and Holton (2007), Holton and Glaser (2012), and Walsh et al. (2015), provide a succinct clarification about the coding procedures, it might still be confusing for a new researcher. I found it challenging to comprehend how the conceptualization of the interrelationships of the concepts identified during the substantive coding (which occurs in the theoretical coding phase) does not lead to an interpretivist construction of the theory. This issue is related to the philosophical challenge in that the theoretical coding may be argued to highly engage the researcher's interpretation and judgment. The postpositivist approach, which is mainly represented by the Straussian grounded theory, and the constructivist grounded theory, which is represented by Charmaz, address the issue by suggesting different coding procedures that comply with the philosophical stances that grounded theory cannot be purely positivist, and the theory is the outcome of the researcher's interaction with the data and participants. The coding procedures facilitate the creation and construction (rather than the emergence) of the theory (as shown in Case Study 1). The coding procedures suggested by Straussian grounded theory (Strauss & Corbin, 1990) include four major phases: open coding, axial coding, selective coding, and conditional matrix. Charmaz's (2008) coding procedure is more similar to that of the classic grounded theory in terms of the number and nature of the phases. The coding procedure includes initial (a.k.a. open) coding, and refocused coding.

The final challenge concerns the use of qualitative data analysis software in the codification process. This is an issue that may be relevant to all interpretive studies. Although QSR NVivo™ Software was used for coding, my later experience using the pen-and-paper technique (sometimes using Microsoft Office Word) proved to me that computer-aided codification may not necessarily lead to better outcomes or suit everyone. Although the use of NVivo improved the pace of the codification and data management, it added complexity later in the analysis process when I tried to identify the main themes in the data. The software failed to offer strong analytical neutrality, as also reported by Dainty, Bagilhole, and Neale (2000) and may lead to overcoding (Blismas & Dainty, 2003). The researcher is very likely to get trapped in a coding-and-linking loop instead of coding, linking (constant comparison), and identifying/conceptualizing the themes. Although the features of the software were interesting, I found that using it for qualitative data analysis can lead to a fuzzy and indistinguishable set of overly interconnected codes. This makes the themes' conceptualization very difficult and time consuming.

I suggest that researchers new to qualitative studies in general, and to grounded theory in particular, conduct a comprehensive examination of the possible tools and methods that are available considering their technical and analytical abilities and also the research questions. The approaches suggested by Strauss and Corbin (1990) and Charmaz (2006) seem to be easier to implement and to fit into the process of a PhD study in terms of, for example, conducting a literature review prior to the study, especially for new PhD researchers (as shown in Case Study 1). I, however, chose classical grounded theory. This was done mainly to minimize the confusion resulting from the diversity and inconsistency of the non-Glaserian approaches.

Case Study 3: A Supervisor's Perspective

I completed my PhD in 2001. I used an action grounded learning method that involved action learning training sessions to collect data and grounded theory to analyze the data (Pauleen, 2001). This was an early use of grounded theory in information systems. At that time, I was cautious about claiming to be conducting a pure grounded theory study as I reasoned that the subject matter training that I gave my participants somehow influenced the data collection. Hence, I claimed to use a grounded theory approach. As grounded theory has evolved so far in the last 15 years to encompass a number of different interpretations and approaches, I am not sure I would be as reticent now; instead, I would probably drop the word "approach" and simply state the methodology as grounded theory.

As a supervisor, I have supervised, and am currently supervising, four PhD students who used grounded theory as their primary methodology (one used mixed methods, grounded theory followed by survey; one is using a grounded action learning methodology similar to the one I used). Because in New Zealand, PhD students do not generally have classes in methodology beyond a masters level course, the student is responsible for learning and indeed becoming expert in the methodology/methods they choose for their PhD research. I advise students who want to use grounded theory as a methodology (or a data analysis method) to first

read all the seminal grounded theory texts by Glaser, Strauss, and Corbin (as discussed elsewhere in this article) as well as the later writings by Charmaz and others. I also encourage students to read published papers in grounded theory in their field of study (e.g., management, information systems, etc.). Students should be completely familiar with grounded theory before their formal confirmation as PhD students and of course before data collection begins. They will continue to read on grounded theory as they engage in data collection and analysis, and all through the process of reading about grounded theory and using it, they will consult with their supervisors.

Finally, my students are encouraged to reflect on their use of grounded theory by writing conference papers and journal articles about their experiences using grounded theory during and after their PhD studies, as is the case with this article.

Further Challenges Identified in the Literature

In this section, we further discuss other challenges that other grounded theory researchers have identified. These challenges are usually overlooked or less emphasized in the grounded theory literature, and include the nature of the research problem, the research question, the interview questions, and researcher's intention in developing a theory.[2] We believe that a review of these challenges can help PhD and novice researchers, and researchers in general, decisively choose, early in the process, between the Glaserian and the Straussian approach. Reference to the case studies will be made wherever applicable.

The Research Problem in Grounded Theory

Choosing, or finding, a research problem is one of the most difficult and significant tasks in doing research. The research problem will be where new researchers spend most of their time during their entire study and can sometimes determine their future careers.

In the Glaserian approach, the research problem is discovered or emergent during data collection or analysis, and not chosen beforehand (Glaser, 1992). According to Glaser (1992), the research problem "will emerge as well as the manner by which the subjects involved continually process it" (p. 21). Any "thought up" research problem is considered a preconception that leads "no where" (Glaser, 1992). Finding an interest in a substantive area, proposing a research problem, and then finding a population is not a grounded theory; it is considered preconceived and forcing a problem (Glaser, 1992). This is because it misses what the population's problems really are. Even consulting the related literature, while it might have a level of "groundedness," should be done with caution.

Hence, the researcher should fight the temptation to find a particular problem, and rather move into an area of interest with an "abstract wonderment" and with an open mind (Glaser, 1992, p. 24). Glaser (1992) writes, "the grounded theory researcher . . . moves into an area of interest with no problem" (p. 22). That is, the researcher moves in with only a general wonderment about what is going on. If you are interested in studying people in pain, Glaser (1992) writes, you will discover what problem pain produces. The research problem will then emerge from data collection, coding, constant comparison, and further data collection. To Glaser (1992) "areas of interest are not hard to come by" (p. 23); the researcher should trust that the problem will emerge easily within the first few interviews.

In contrast, while in agreement with the Glaserian approach, the Straussian approach has more options and flexibility. In the Straussian approach, "the sources of research problems in the grounded theory approach are no different from those of other approaches to qualitative research" (Strauss & Corbin, 1990, p. 33). The Straussian approach, therefore, provides four sources for research problems, namely: advisor or mentor, technical and nontechnical literature, personal or professional experience, and pilot projects (Corbin & Strauss, 2008, p. 32). Pilot projects are what the Glaserian approach refers to as moving into an area of general interest with no specific problem. Here, Corbin and Strauss's (2008) suggestion may be useful. As shown in Case Study 1, a novice researcher can ask his or her supervisor about an ongoing research problem, review the relevant literature for gaps or contradictions, or use personal experience, such as a divorce, to explore the issue further (Corbin & Strauss, 2008).

In summary, the presence or absence of a research problem, in an area of interest or otherwise, can be a determining factor in deciding between the two approaches. Researchers wishing to start their research with a predetermined research problem might prefer to use the Straussian approach; otherwise, the Glaserian approach can be used for open research interest or a general wonderment with no specific problem. The latter approach might be interpreted as being in line with changes in focus and subjects that often happen at the early stages of PhD studies. Table 2 highlights these differences.

Grounded Theory and the Research Question

The research question is the cornerstone upon which the whole study depends. The formulation of the research question at the early stages of the research can be a deciding factor in choosing between the two approaches.

The Glaserian approach prohibits the grounded theory researcher from entering the field with a predetermined research question. This is not to say there is no question in the Glaserian approach; rather, the question is broad and general and becomes focused as more data collection and analysis are

Table 2. Glaserian and Straussian Approaches to the Research Problem at Early Stages.

Research problem	Glaserian approach	Straussian approach
General wonderment	✓	✓
Area of interest with no specific problem	✓	✓
Specific research problem	×	✓

conducted. This is because Glaserian grounded theory is not interested in a question to answer at the beginning but rather to find out the main concern of a population (Glaser, 2014). If you are interested in how women manage pregnancy, for example, the focus is not women, but to discover their problems and resolutions (Glaser, 1992). After the first few interviews and analysis, the research question is then formulated and made focused to accommodate the emergent problems. Glaser (1992) clearly writes in his response to Strauss and Corbin (1990):

> To repeat, the research question in a grounded theory study is not a statement that identifies the phenomenon to be studied. The problem emerges and questions regarding the problem emerge by which to guide theoretical sampling. Out of open coding, collection by theoretical sampling, and analyzing by constant comparison emerge a focus for the research. (p. 25)

The rationale behind the Glaserian approach is that formulating a research question at the beginning of the research is considered forcing a problem with a preconceived question; the research question should emerge easily within the first phases of data collection. This solution, however, may lead to the methodological challenge as outlined in Case Study 2. In PhD studies, and also in all other research projects, the research question is a determining factor. It depends to a high degree on the research question whether the method to be used in the study should be a qualitative or quantitative one. However, due to the wide use of interviews as the data collection technique in grounded theory studies, grounded theory is categorized under qualitative methods. Glaser insists that grounded theory neatly falls into any qualitative or quantitative categories. Deciding on whether or not the research method should be a qualitative or quantitative one, without a carefully articulated research question, may be very challenging for all research projects in general.

While in agreement with the Glaserian approach, and as indicated in Case Study 1, the Straussian approach believes that the researcher can initiate an enquiry with a predetermined, yet flexible, research question, which arises from a partial review of the existing literature among other sources (Strauss & Corbin, 1990). In the Straussian approach, the researcher starts with a question that is an "open and broad one; but not so open, of course as to allow for the entire universe of possibilities" (Strauss & Corbin, 1990, p. 38). In the example of pregnant women, if you are interested in pregnant women with chronic illness, then the question can be formulated as the following: "How do women manage a pregnancy complicated by chronic illness?" (Strauss & Corbin, 1990, p. 38). Such a question is not too broad or narrow; it highlights the phenomenon to be studied and the specific focus. Unlike the Glaserian approach, the Straussian approach believes that the research question is a statement that identifies the phenomenon to be studied, and, therefore, should be focused and specific. Strauss and Corbin (1990) write, "The research question in a grounded theory study is a statement that identifies the phenomenon to be studied. It tells you what you specifically want to focus on and what you want to know about this subject" (p. 38).

In summary, in the Glaserian approach, the data collection must precede the research question; however, in the Straussian approach, the research question can precede data collection. Therefore, researchers should consider the issue of the research question, which has an impact on choosing between the two approaches. Table 3 recaps these differences.

Interview Questions in Grounded Theory

The interview questions are another key difference that can help PhD and novice researchers determine the more appropriate of the two approaches. The interview questions in the Glaserian approach simply emerge during or after the first few interviews are conducted and then become more focused and structured as more interviews and analysis are conducted. Accordingly, no preconceived interview questions should be asked directly during interviews; instead, "interview questions have to relate directly to what the interview is about empirically" (Glaser, 1992, p. 25). In the Glaserian approach, the role of the researcher during interviews is to simply tap into the emerging variables that work. Glaser (1992) writes,

> The researcher never, never asks the question directly in interviews as this would preconceive the emergence of data. Interview questions have to relate directly to what the interview is about empirically, so the research maximizes the acquisition of non-forced data. (p. 25)

In contrast, the Straussian approach is open to using the three types of interview questions: structured, semistructured, and unstructured. However, Corbin and Strauss (2015) strongly advise against using structured interview questions for grounded theory. The unstructured style, which is the Glaserian approach, is also the preferred style in the Straussian approach; however, the semistructured interview question has its merit in the Straussian approach for its ability to provide the researcher with consistency over the concepts (Corbin & Strauss, 2015).

Table 3. Glaserian and Straussian Approaches to the Research Question at Early Stages.

Research question	Glaserian approach	Straussian approach
General wonderment	✓	✓
Open research question	×	✓
Narrow research question	×	×

Table 4. Glaserian and Straussian Approaches to the Interview Questions at Early Stages.

Interview questions	Glaserian approach	Straussian approach
Unstructured	✓	✓
Semistructured	×	✓
Structured	×	×

> Once the researcher has decided on the respondents, the place, the time, and the types of data to be gathered . . . , he or she is ready to develop a list of interview questions or areas for observation. (Usually, this must be done to satisfy the requirements of human subjects committees.) Initial interview questions or areas of observation might be based on concepts derived from literature or experience or, better still, from preliminary fieldwork. (pp. 204-205)

It is important to note that while semistructured interview questions are permissible in the Straussian approach, the researcher should always allow the participants to comment and add further data if they wish. Moreover, the original interview guide should be revised and adjusted if new concepts arrive from the data (Corbin & Strauss, 2015).

In sum, researchers' decision on whether to design an interview guide and have predesigned interview questions, structured or semistructured, is a decisive factor between the Glaserian and the Straussian approach. Table 4 summarizes the differences between the two approaches regarding the interview questions.

Scaling Up the Theory or Theory Building

Theory development is a stage in grounded theory where the researcher tries to link and relate different categories to develop a theory. When categories and constituent concepts are studied, refined, and linked, this may lead to theory development that gives meaning to the data (Merriam & Tisdell, 2014). Thinking about conceptual ordering, conditions, and dimensions is a precursor to theorizing in grounded theory (Corbin & Strauss, 2015). Theorizing is the process of building theory and it involves different cognitive ways to stimulate the creation of a theory (Shepherd & Suddaby, 2017). It represents a way of moving from a concrete description of the data to a more conceptual level that explains the phenomenon under study (Shepherd & Suddaby, 2017). As a result, theorizing is laborious work that constitutes multiple activities to arrive at a creative and effective theory (Shepherd & Suddaby, 2017; Weick, 1995). This is reflected in Case Study 1 where the researcher found theorizing a challenging task and continues to struggle with the data and consult with others to create a theory.

In the Glaserian approach, no preconceived hypotheses are necessary in generating a theory. A theory should be discovered without any attempt to try to link categories. Although a researcher should compare and contrast different categories to arrive at a relationship and a core category, this should happen naturally. If not, the researcher should let go (Glaser, 1992). The researcher in the Glaserian approach should almost stumble upon a theory rather than purposefully tracking down the relationships between categories. The researcher "must trust that the emergence will occur and it does" (Glaser, 1992, p. 4). This is done by asking questions like as follows: What does this category indicate? and What is the chief problem in this area?

The Glaserian approach is very explicit on the issue of theory emergence. Glaser writes that the researcher should be patient with data and trust the emergence will occur (Glaser, 1992). Indeed, one of the main criticisms of the Straussian approach is that it became more programmatic and over-formulaic (Melia, 1996). The Straussian approach's use of multiple tools of questioning techniques and coding frameworks does assist but also may impose or force concepts and theory development (Boychuk Duchscher & Morgan, 2004). The Straussian approach offers many analytical tools, such as flip-flop, waving the red flag, and conditional matrix, to assist researchers in creating a theory. Some characterize this as forcing rather than emerging (Boychuk Duchscher & Morgan, 2004).

The Straussian approach provides systematic steps and processes to help guide the researcher in developing a theory, including drawing diagrams, filling the gaps, using metaphors, and talking to a professor or a colleague (Corbin & Strauss, 2008). All of this is meant to integrate the findings into one core category. They designed a highly systematic and detailed coding structure to create a theory, namely open coding, axial coding, and selective coding. After open coding, and during axial coding, the Straussian approach encourages the researcher to hypothesize and to relate and link categories and their properties together in an effort to create a theory or a model. Axial coding is when "categories are related to their subcategories, and the relationships tested against data" (Corbin & Strauss, 2008, p. 198). Glaser (1992) calls this forcing the data into preconceived concepts; according to Glaser, the concepts and these categories should be allowed to emerge without any effort to relate them.

This matter is reflected in the philosophical challenge of Case Study 2. The researcher may find it difficult to justify whether their study draws on an interpretivist-inductive or

Table 5. Summary of the Grounded Theory Challenges and Recommendations.

Challenge	Description	Recommendation
Philosophical position	The philosophical position of the researcher.	Grounded theory can be neutral and used regardless of the researcher's philosophical position.
Literature review	Reviewing the literature prior to starting the research.	Reviewing the literature is now conditionally accepted by some grounded theorists with the condition that only the generated categories and theory would determine the research path.
Coding procedures	Choosing among the different coding procedures between the Glaserian and the Straussian grounded theory approaches.	The researcher should decide between the two approaches and then follow its coding procedures accordingly.
Research problem	The main problem of the research or thesis.	Grounded theory in general advocates pursuing an area of interest or discovering a research problem within a population. Researchers wishing to start with a "thought up" research problem, from the literature or otherwise, might prefer to use the Straussian approach.
Research question	The main question of the research or thesis.	Grounded theory encourages starting with a broader research question that becomes focused as more data are collected and analyzed. Researchers with a semidetermined research question might prefer to use the Straussian approach.
Interview questions	The main interview questions or guide in the research or thesis.	Unstructured interview questions are preferred in grounded theory research with the flexibility for semistructured questions in the Straussian approach. Structured interview questions are strongly discouraged.
Theorizing or building a theory	The process of building or developing a theory/core category.	While both grounded theory approaches allow and encourage theorizing and the natural emergence of a theory, the Straussian approach is more programmatic in creating a theory.

positivist-deductive epistemology later in the research process when writing up the report. When it comes to data analysis, the challenge is more significant. This might be the reason why Charmaz (2000, 2006), unlike Glaser and Strauss, emphasizes that grounded theory leads to a socially constructed theory.

To sum up, it is critical for researchers to be well aware of the major branches of grounded theory, before commencing their study. PhD and novice researchers' intent toward theory building can be a factor in deciding between the two approaches. The Straussian approach allows researchers to hypothesize, contextualize, and relate certain categories and their properties together to create a theory. However, the Glaserian approach encourages the natural emergence of a theory without purposefully and directly linking categories or concepts.

Table 5 describes all the main challenges discussed in the article and the recommended approach.

Limitations and Future Research

Although this article discusses the constructivist grounded theory approach, the discussion is focused on the two original strands of grounded theory, namely the Straussian approach and Glaserian approach. There are other approaches identified such as feminist grounded theory (Fernandez, 2012). Another limitation is that this article did not discuss the impact of the field of study on what approach might be suitable. For example, does the suitability of each approach significantly vary from one field to another (e.g., from finance to psychology)? Future research may also focus on the use and effects of different qualitative analysis software on grounded theory coding and analysis.

Conclusion

We have outlined the basic practical steps in this article that offer new ideas and insights for doctoral and early grounded theory research carried out in complex organizational and management settings. These ideas are not limited to early researchers; they can also be used and applied by more experienced researchers. Such steps will save researchers time, effort, and anxiety and, more significantly, allow them to make an informed decision while contributing to better grounded theory research and results in management and organizational research. Based on substantive material, we have emphasized and discussed different aspects of grounded theory methodology that are basic, yet significant, determinants for deciding between the Glaserian and Straussian

approaches and illuminating researchers' work when adopting grounded theory research.

With that said, researchers should not feel obliged to decide on either of the two approaches at the start of their journey. They should tolerate ambiguity, confusion, and lack of confidence at the early stages of their studies. Grounded theory is a learning curve. At any stage of the research, a researcher can change to either approach, or even retreat to other qualitative research methods.

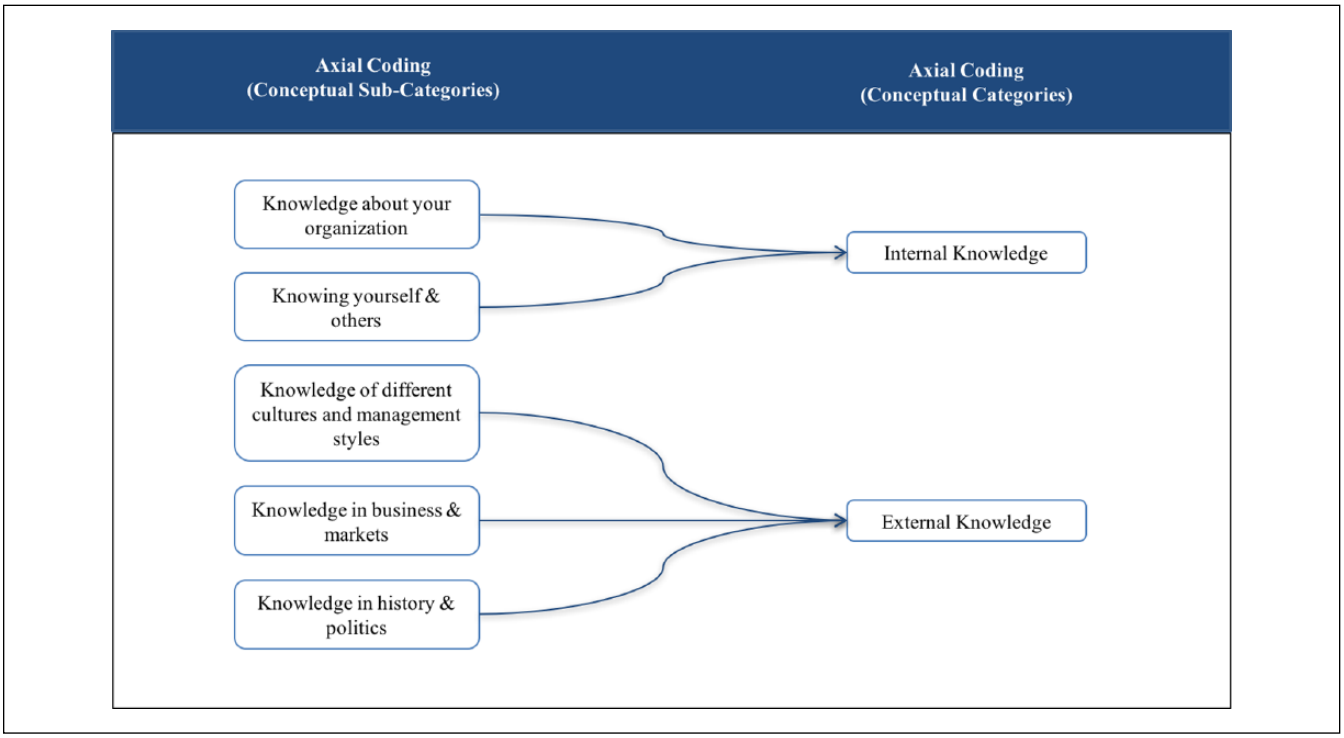
From a supervisor's perspective, students should take full responsibility for understanding the various nuances of the different approaches and continuously reflect on their use of grounded theory. Supervisors must question their students to test their understanding. Conference presentations and journal articles help the novice researchers to develop and defend their understanding and use of the grounded theory. Through these processes, they will one day be ready to supervise their own PhD students.

Appendix A

Line-by-Line Coding in Open Coding.

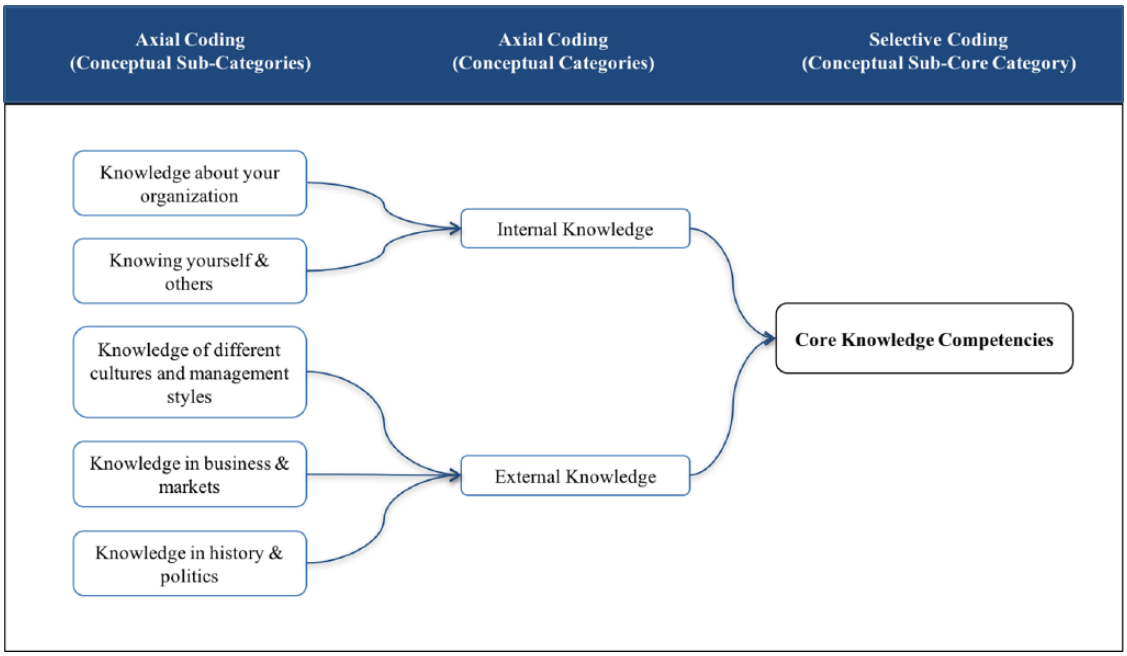
Participant quote	Open codes (Coding line-by-line)
So, I think if we want to do business with different cultures overseas, what we need to do is we need to learn about the cultures, learn about the people, learn about the history of those countries, about the political issues that they are facing, about the environment in those countries, if we do not know that then I do not think we can do business with any country.	Doing business Learning Cultural knowledge—Knowledge in history Knowledge of politics Environmental knowledge/business environment

Appendix B



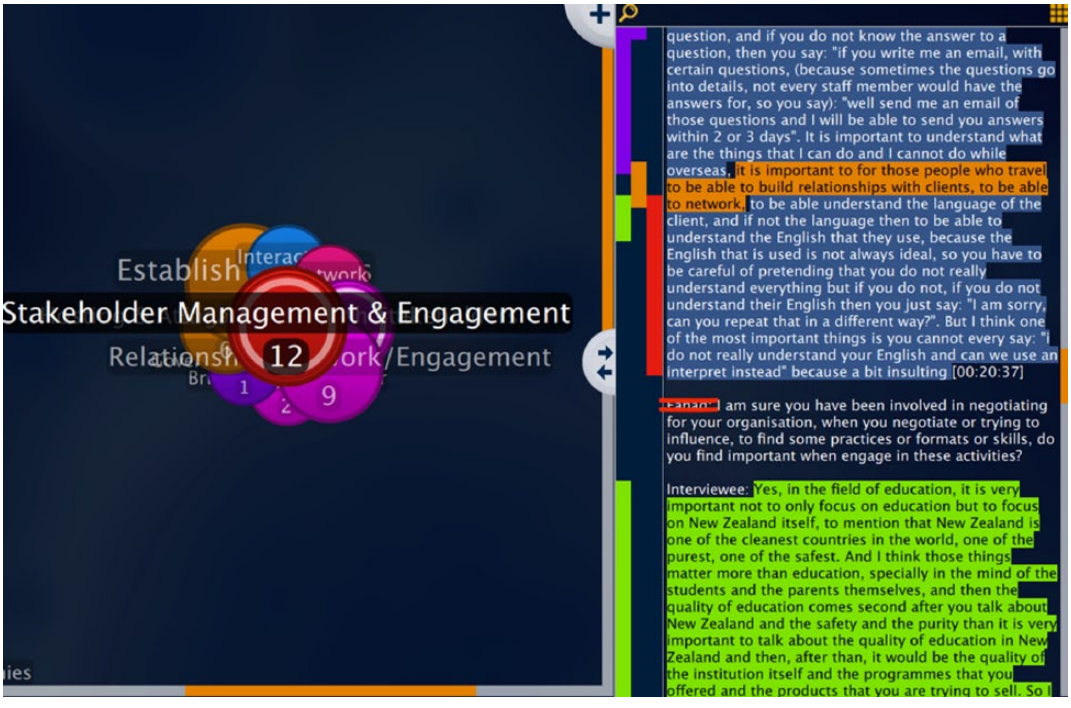
Conceptual subcategories and categories developed in axial coding.

Appendix C



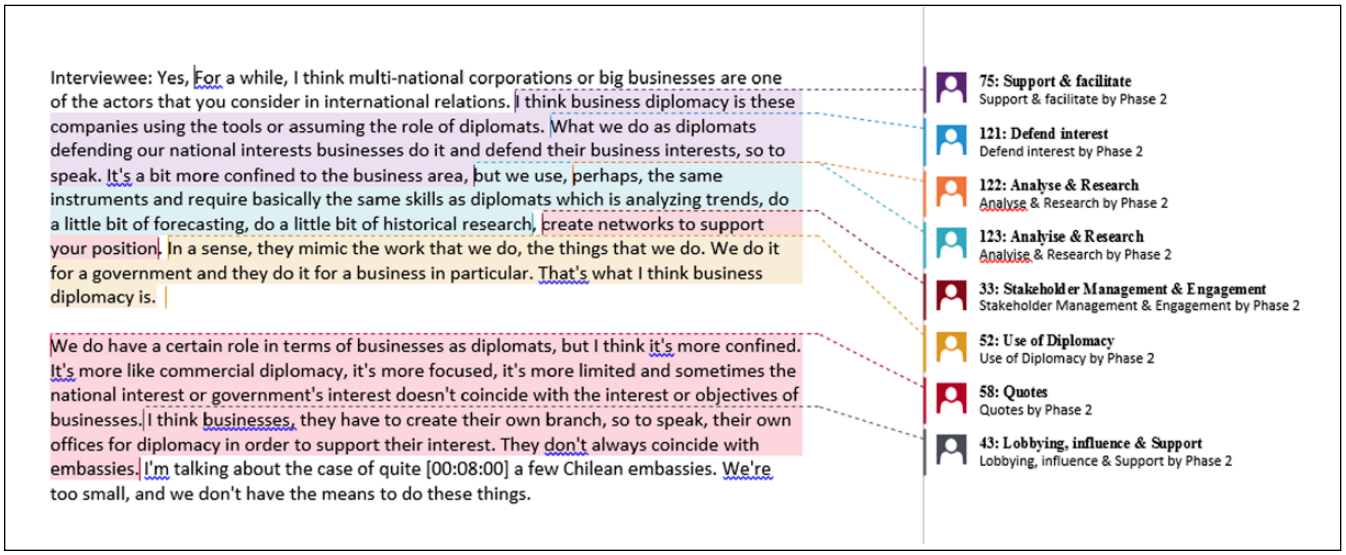
Subcore category developed in selective coding.

Appendix D



Screenshot from Quirkos™ illustrating the main display page with coding strips (right) and the corresponding bubbles (categories).

Appendix E



A standard word document exported from Quirkos™ with all the coding preserved as color-based highlights.

Declaration of Conflicting Interests

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

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Notes

1. For the discussion of quantitative data in classic grounded theory see Glaser (2008).
2. An exception to this is Ahmed and Haag (2016) who emphasized the role of the research question and the interview guide in grounded theory; however, the authors did not attempt to make any comparisons with Straussian grounded theory.

ORCID iD

Fahad M. Alammar https://orcid.org/0000-0002-6902-6968

References

Abrahamson, E. (2008). 22 things I hate: Mini rants on management research. *Journal of Management Inquiry*, *17*, 422-425. doi:10.1177/1056492608324093

Ahmed, S., & Haag, M. (2016). Entering the field: Decisions of an early career researcher adopting classic grounded theory. *The Grounded Theory Review: An International Journal*, *15*, 76-92.

Annells, M. (1996). Grounded theory method: Philosophical perspectives, paradigm of inquiry, and postmodernism. *Qualitative Health Research*, *6*, 379-393.

Birks, M., & Mills, J. (2011). *Grounded theory: A practical guide*. London, England: Sage.

Blismas, N. G., & Dainty, A. R. J. (2003). Computer-aided qualitative data analysis: Panacea or paradox? *Building Research & Information*, *31*, 455-463. doi:10.1080/0961321031000108816

Boudreau, M.-C., & Robey, D. (2005). Enacting integrated information technology: A human agency perspective. *Organization Science*, *16*, 3-18. doi:10.1287/orsc.1040.0103

Boychuk Duchscher, J. E., & Morgan, D. (2004). Grounded theory: Reflections on the emergence vs. forcing debate. *Journal of Advanced Nursing*, *48*, 605-612. doi:10.1111/j.1365-2648.2004.03249.x

Bryant, A. (2002). Re-grounding grounded theory. *Journal of Information Technology Theory and Application*, *4*, 25-42.

Charmaz, K. (2000). Grounded theory: Objectivist and constructivist methods. In N. K. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (pp. 509-536). Thousand Oaks, CA: Sage.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. London, England: Sage.

Charmaz, K. (2008). Grounded theory as an emergent method. In S. N. Hesse-Biber & P. Leavy (Eds.), *Handbook of emergent methods* (pp. 155-172). New York, NY: Guilford Press.

Charmaz, K. (2011a). A constructivist grounded theory analysis of losing and regaining a valued self. In F. J. Wertz, K. Charmaz, L. J. McMullen, R. Josselson, R. Anderson, & E. McSpadden (Eds.), *Five ways of doing qualitative analysis: Phenomenological psychology, grounded theory, discourse analysis, narrative research, and intuitive* (pp. 165-204). New York, NY: Guilford Press.

Charmaz, K. (2011b). Grounded theory methods in social justice research. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (pp. 359-380). Thousand Oaks, CA: Sage.

Corbin, J., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, *13*, 3-21.

Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Thousand Oaks, CA: Sage.

Corbin, J., & Strauss, A. (2015). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (4th ed.). Thousand Oaks, CA: Sage.

Cowling, K. C. (2015). *Problem food cravings: A cycle fed by stigma and shame, a classical grounded theory exploration of the experience of food cravings in obese and formerly-obese women* (Doctoral dissertation, The University of Texas at Austin). Retrieved from https://utmb-ir.tdl.org/utmb-ir/handle/2152.3/653

Cunliffe, A. L. (2011). Crafting qualitative research: Morgan and Smircich 30 years on. *Organizational Research Methods*, *14*, 647-673.

Cutcliffe, J. R. (2000). Methodological issues in grounded theory. *Journal of Advanced Nursing*, *31*, 1476-1484. doi:10.1046/j.1365-2648.2000.01430.x

Dainty, A. R. J., Bagilhole, B. M., & Neale, R. H. (2000). Computer aided analysis of qualitative data in construction management research. *Building Research & Information*, *28*, 226-233. doi:10.1080/09613210050073689

El Hussein, M. T., Kennedy, A., & Oliver, B. (2017). Grounded theory and the conundrum of literature review: Framework for novice researchers. *The Qualitative Report*, *22*, 1198-1210.

Fernandez, C. (2012). Guest editorial, themed section. *The Grounded Theory Review: An International Journal*, *11*, 7-28.

Glaser, B. (1978). *Theoretical sensitivity: Advances in the methodology of grounded theory*. Mill Valley, CA: Sociology Press.

Glaser, B. (1992). *Basics of grounded theory analysis: Emergence vs. forcing*. Mill Valley, CA: Sociology Press.

Glaser, B. (1998). *Doing grounded theory: Issues and discussions*. Mill Valley, CA: Sociology Press.

Glaser, B. (2002). Constructivist grounded theory? *Qualitative Social Research*, *3*(3), Article 12.

Glaser, B. (2003). *The grounded theory perspective II: Description's remodeling of grounded theory methodology*. Mill Valley, CA: Sociology Press.

Glaser, B. (2008). *Doing quantitative grounded theory*. Mill Valley, CA: Sociology Press.

Glaser, B. (2009). The novice GT researcher. *The Grounded Theory Review: An International Journal*, *8*(2), 1-21.

Glaser, B. (2014). Choosing grounded theory. *The Grounded Theory Review: An International Journal*, *13*(2), 3-19.

Glaser, B., & Holton, J. (2007). Remodeling grounded theory. *Historical Social Research / Historische Sozialforschung*, *32*(Supplement), 47-68.

Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Hawthorne, NY: Aldine de Gruyter.

Gligor, D. M., & Holcomb, M. (2013). The role of personal relationships in supply chains: An exploration of buyers and suppliers of logistics services. *The International Journal of Logistics Management*, *24*, 328-355.

Goulding, C. (2002). *Grounded theory: A practical guide for management, business and market researchers*. London, England: Sage.

Heath, H., & Cowley, S. (2004). Developing a grounded theory approach: A comparison of Glaser and Strauss. *International Journal of Nursing Studies*, *41*, 141-150.

Holton, J. A. (2007). The coding process and its challenges. In A. Bryant & K. Charmaz (Eds.), *The SAGE handbook of grounded theory* (pp. 265-289). Thousand Oaks, CA: Sage.

Holton, J. A. (2008). Grounded theory as a general research methodology. *The Grounded Theory Review: An International Journal*, *7*(2), 22-27.

Holton, J. A., & Glaser, B. G. (2012). *The grounded theory review methodology reader: Selected papers 2004-2011*. Mill Valley, CA: Sociology Press.

Intezari, A. (2014). *Wisdom and decision making: Grounding theory in management practice* (Doctoral thesis, Massey University, Auckland, New Zealand). Retrieved from https://mro.massey.ac.nz/handle/10179/5374

Intezari, A., & Pauleen, D. J. (2017). Conceptualizing wise management decision-making: A grounded theory approach. *Decision Sciences*, *49*, 335-400.

Jones, R., & Noble, G. (2007). Grounded theory and management research: A lack of integrity? *Qualitative Research in Organizations and Management: An International Journal*, *2*, 84-103.

Kenny, M., & Fourie, R. (2015). Contrasting classic, Straussian, and constructivist grounded theory: Methodological and philosophical conflicts. *Qualitative Report*, *20*, 1270-1289.

Länsisalmi, H., Peiró, J. M., & Kivimäki, M. (2004). Grounded theory in organizational research. In C. Cassell & G. Symon (Eds.), *Essential guide to qualitative methods in organizational research* (pp. 242-255). London, England: Sage.

Locke, K. (1996). Rewriting the discovery of grounded theory after 25 years? *Journal of Management Inquiry*, *5*, 239-245. doi:10.1177/105649269653008

Madill, A., Jordan, A., & Shirley, C. (2000). Objectivity and reliability in qualitative analysis: Realist, contextualist and radical constructionist epistemologies. *British Journal of Psychology*, *91*, 1-20.

Martin, V. B. (2006). The relationship between an emerging grounded theory and the existing literature: Four phases for consideration. *The Grounded Theory Review: An International Journal*, *5*(2/3), 47-57.

Melia, K. M. (1996). Rediscovering Glaser. *Qualitative Health Research*, *6*, 368-378. doi:10.1177/104973239600600305

Merriam, S. B., & Tisdell, E. J. (2014). *Qualitative research: A guide to design and implementation* (4th ed.). San Francisco, CA: John Wiley.

Nathaniel, A. K. (2006). Thoughts on the literature review and GT. *The Grounded Theory Review: An International Journal*, *5*(2/3), 35-42.

Oktay, J. S. (2012). *Grounded theory*. Oxford, UK: Oxford University Press.

Pauleen, D. J. (2001). *A grounded theory of virtual facilitation: Building relationships with virtual team members* (Doctoral thesis, Victoria University of Wellington, New Zealand). Retrieved from http://researcharchive.vuw.ac.nz/handle/100 63/363

Poisseroux, M. L. (2010). *Making a difference: A grounded theory study of employee involvement in the workplace* (Doctoral dissertation, Capella University, Minneapolis, MN). Retrieved from https://search.proquest.com/openview/23fc7bddee380f8c00e8af060434ebf5/1?pq-origsite=gscholar&cbl=18750&diss=y

Schurch, L. (2015). *Seducing engagement: A classic grounded theory study of virtual leadership* (Doctoral dissertation, Walden University, Minneapolis, MN). Retrieved from http://scholarworks.waldenu.edu/dissertations/243

Shepherd, D. A., & Suddaby, R. (2017). Theory building: A review and integration. *Journal of Management*, *43*, 59-86. doi:10.1177/0149206316647102

Simmons, O. E. (2011). Why classic grounded theory? In V. B. Martin & A. Gynnild (Eds.), *Grounded theory: The philosophy, method and work of Barney Glaser* (pp. 15-30). Boca Raton, FL: Brown Walker Press.

Strauss, A. (1987). *Qualitative analysis for social scientists*. Cambridge, UK: Cambridge University Press.

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage.

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks, CA: Sage.

Suddaby, R. (2006). From the editors: What grounded theory is not. *Academy of Management Journal*, *49*, 633-642. doi:10.5465/AMJ.2006.22083020

Tan, J. (2014). Grounded theory in practice: Issues and discussion for new qualitative researchers. *Journal of Documentation*, *66*, 93-112. doi:10.1108/00220411011016380

Thistoll, T., Hooper, V., & Pauleen, D. J. (2016). Acquiring and developing theoretical sensitivity through undertaking a grounded preliminary literature review. *Quality & Quantity*, *50*, 619-636. doi:10.1007/s11135-015-0167-3

Turner, D. (2014, July 18). Paper vs. computer assisted qualitative analysis [Quirkos Blog]. Retrieved from https://www.quirkos.com/blog/post/paper-vs-computer-assisted-qualitative-analysis

Turner, D. (2016, July 8). What actually is grounded theory: A brief introduction [Quirkos Blog]. Retrieved from https://www.quirkos.com/blog/post/qualitative-grounded-theory-overview

Urquhart, C. (2002). Regrounding grounded theory—Or reinforcing old prejudices? A brief reply to Bryant. *Journal of Information Technology Theory and Application*, *4*(3), 43-54.

Urquhart, C. (2013). *Grounded theory for qualitative research: A practical guide*. London, England: Sage.

Urquhart, C., & Fernandez, W. (2006). Grounded theory method: The researcher as blank slate and other myths. In *ICIS 2006 proceedings* (Paper 31). Retrieved from http://aisel.aisnet.org/icis2006/31/

Walsh, I., Holton, J. A., Bailyn, L., Fernandez, W., Levina, N., & Glaser, B. (2015). What grounded theory is…A critically reflective conversation among scholars. *Organizational Research Methods*, *18*, 581-599. doi:10.1177/1094428114565028

Weick, K. E. (1995). What theory is not, theorizing is. *Administrative Science Quarterly*, *40*, 385-390. doi:10.2307/2393789

Xiao, J. Z., Dahya, J., & Lin, Z. (2004). A grounded theory exposition of the role of the supervisory board in China. *British Journal of Management*, *15*, 39-55. doi:10.1111/j.1467-8551.2004.t01-1-00399.x