

## Using Grounded Theory as a Method of Inquiry: Advantages and Disadvantages

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There are many challenges and criticisms attached to the conduct of research, none the least of which is a notion that much of the research undertaken in professional disciplines such as nursing may not have clinical and/or practical relevance. While there are a plethora of qualitative research methods that individuals must consider when designing research studies, one method stands out - Grounded Theory (GT). Grounded theory was developed in the early 1960's by Glaser and Strauss. With its theoretical orientation based in sociology, GT strives to understand and explain human behavior through inductive reasoning processes (Elliott & Lazenbatt, 2005). Because of its emphasis on the utilization of a variety of data sources that are grounded in particular contexts, GT provides a natural theoretical fit when designing nursing research studies. In this article, the authors provide an overview of GT and then describe the appropriateness, advantages, and disadvantages of applying it as part of the research design process. Additionally, the authors highlight the importance of taking a reflexive position to stay engaged while interacting with the data, and explore how to apply GT theory to particular research questions and studies. Finally, the strengths and limitations of this method of inquiry as applied to nursing research using a brief case study approach is presented. Keywords: Grounded Theory, Advantages, Constructivist Grounded Theory

According to MacDonald (2001) Grounded Theory (GT) is characterized by its concrete and structured guidelines, a feature that helps novice researchers in their investigation and is a good fit for the pragmatic approach of the practice of nursing. Moreover, GT offers a practical and flexible approach to interpret complex social phenomena (Charmaz, 2003); and it provides a strong intellectual justification for using qualitative research to develop theoretical analysis (Goulding, 1998). It is worth noting that GT was developed as a reaction to the passive acceptance that all the "great" theories have been discovered and that the main task of research is to test these theories by using quantitative scientific procedures (Charmaz, 1983). It is the assertion of the authors of this paper that GT will expose the researchers' data to "rigorous analysis" in order to "develop theoretical analysis" (Charmaz, 2006, p. 127). Thus, GT is a way of thinking about data with the intent to conceptualize it (Charmaz, 2009). Data is continuously subject to interrogation until the theory emerges (Charmaz, 2006). Globally, grounded theorists start with inductive logic even though they differ on their foundational assumptions. GT also "provides a frame for qualitative inquiry and guidelines for conducting it" (Charmaz, 2009, p. 127). Inductive logic means that the researcher does not start with a hypothesis or theory and then prove or disprove it, but rather the researcher first starts by collecting data in the setting, concurrently analyzes it, and then generates a hypothesis (Strauss & Corbin, 1990). According to Glaser (1998), GT is "enjoyable, meaningful, informative, and empowering" hence, "JUST DO IT" (p. 19) because it fits, works and is appealing.

In this article, we provide an overview of GT and then describe the appropriateness, advantages and disadvantages of applying it as part of the research design process. Additionally, we highlight the importance of taking a reflexive position to keep the researcher engaged, while interacting with data, and to explore how to apply GT theory to particular research questions and studies. Finally, we explore the strengths and limitations of this method of inquiry when it is applied to nursing research using a brief case study approach.

## Appropriateness of GT as a Method of Inquiry

As a qualitative method of inquiry, GT follows many of the same steps as in other research frameworks. The steps in GT:

- 1) initiating research question,
- 2) data selection,
- 3) data collection,
- 4) data analysis, and
- 5) conclusion of the research

The research method selected in any study should be driven by the research question and should be e differentiated from other methods of inquiry by its approach to data collection and analysis (Egan, 2002). Moreover, it should be be relevant to the area of investigation, and should meet the needs and skills of the investigator (Maxwell 2005). Maxwell (2005) added that the research questions are "the heart, or hub, of the model; they connect all the other components of the design, and should inform, and be sensitive to, these components" (p. 5).

According to Jeon (2004), the researcher's ontological, epistemological, and methodological orientations will determine the version of GT to use, which eventually determines which theoretical perspective or philosophy will act as the perfect fit to inform and guide the process of inquiry. Ontology refers to the nature of reality, whereas epistemology is the relationship between the inquirer and the known (Denzin & Lincoln, 2005). The ontology and epistemology determine the methodology or the way we know the world and gain knowledge of it (Denzin & Lincoln, 2005). Mills, Bonner and Francis (2006) claimed that the variability of epistemological positions that grounded theorists embrace is located at several spots on the "methodological spiral" (p. 13), and is guided by and reflective of its underlying ontologies. Researchers must first identify their ontological and epistemological positions, so as to be able to select a spot on the methodological spiral to indicate which GT they are theoretically comfortable with and will enable them to practice and experience their beliefs during the process of inquiry (Mills et al., 2006).

The main advantages of GT are its intuitive appeal, ability to foster creativity, its conceptualization potential, and its systematic approach to data analysis, and the fact that researchers using it can gather rich data. The advantages, disadvantages and limitations with using GT as a method of inquiry are highlighted in Table 1 and further explored in the following sections.

Table 1: Advantages, Disadvantages, and Limitations of GT as a Method of Inquiry
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Advantages	Disadvantages/Limitations
Provides for Intuitive Appeal	Exhaustive Process
Fosters Creativity	Potential for Methodological Errors
Potential to Conceptualize	Reviewing the Literature without Developing Assumptions
Systematic Approach to Data Analysis	Multiple Approaches to GT
Provides for Data Depth & Richness	Limited Generalizability

#### Advantages of GT as a Method of Inquiry

## Intuitive Appeal

At the outset of this argument it is imperative to note that GT is not limited to a specific field, discipline or any type of data (Glaser 1992). GT has informed different areas and has demonstrated a wide range of applicability (Morse, 2009). Myers (2009) argued that GT has an "intuitive appeal" (p. 111) for new investigators because it permits them to get "immersed" (p. 111) deeply within the data. This immersion is translated practically in the constant comparison, coding and memoing approaches to data analysis. Charmaz (2006) supported this notion and asserts that GT provides novice researchers with the needed principles and "heuristic devices" to "get started, stay involved, and finish your [the] project" (p. 2). Charmaz (2006) added that while other qualitative traditions permit investigators to treat data as they please without clear directions on how to proceed, GT provides "explicit guidelines" (p. 3) that direct researchers about how to carry out their research. For many pragmatic researchers, GT is very useful in answering their questions, enlightening their thinking and for providing them with reassurance when hesitations arise during the research process.

## Fostering of Creativity

GT does not start with testing an existing hypothesis, but uses the empirical data to generate concepts and theories (Glaser, 1978). In other words, it does not bias emergence the theory with a priori assumptions (Glaser, 1978). To ascertain this emergence, investigators are encouraged to avoid "preconceived theoretical data" (Myers 2009, p. 108), a suggestion that can be seen as an advantage to enhance creativity and trigger the development of new ideas. Furthermore, GT encourages the researcher to move through a process of discovery whereby themes and interpretations naturally emerge from the data. In essence, GT allows the research to derive meaning from the data and analysis using creative, inductive processes; it allows for the emergence of original findings from the data (Jones, Kriflik, & Zanko, 2005).

The authors argue that this approach could be a double-edged sword and researchers must check the scope of prior research in order to ensure that their study will add to the "corpus of writing" (Stebbins. 2001, p. 42). Glaser (1978) finalized this argument with his statement that "the generative nature of GT constantly opens up the mind of the analyst to a myriad of new possibilities" (p. 6).

#### Potential to Conceptualize

According to Stebbins (personal communication, July 6, 2012), the most important component of science is the "concept." The approach taken to study data will eventually influence the generation of these concepts. Blumer (1969) echoed this notion, as he believes that the root of the problem in the process of finding an answer to an issue are ill-defined concepts which frequently do not allow for a precise, agreed-upon, and correct interpretation of subjective empirical data. Blumer (1969) added that "this condition of imprecise conceptualization lies at the heart of the scientific difficulties" (Blumer, 1969, pp. 171-172). Blumer (1969) further clarified the importance of conceptualization in the process of simplification; in his view conceptualization separates the relevant from the irrelevant. It is worth noting, that in our attempt to show the importance of conceptualization the authors are not trying to undermine the significance of description. Stebbins (personal communication, July, 6, 2012) suggested that the single most important initial step to science is "description". Glaser affirmed Stebbin's position by stating that "immaculate description is the best way to render research data" (p. 3).

GT is unique in its ability to generate concepts by utilizing the logic of constant comparison and frequent memo writing (Glaser, 1978). This specific approach to theory development is derived from the "continuous interplay between data collection and data analysis (Myers, 1997). Glaser (1978) argued that concepts have "broadening power" and are "easier to remember" as they encompass a myriad of incidents, which facilitates the transferability of these concepts into unfamiliar contexts. Furthermore, Glaser (1978) added that there is "much value in the conceptualizing and conceptual ordering of research data" (p. 3). Late Glaser (1998) reiterated a similar position reflected in his statement, "By far the most exciting use of GT over the last ten years is its legitimation of concept generation" (p. 133). Strauss and Corbin (1994, p. 274) identified that "the major difference between this methodology [GT] and other approaches to qualitative research was its emphasis on theory development".

#### Systematic Approach to Data Analysis

A notable advantage of the GT method is in its systematic approach to data analysis. Glaser (1978) defined GT as "systematic generating of theory from data that itself is systematically obtained from social research" (p. 2). Strauss and Corbin (1990) mirrored this definition in their statement that GT is "a qualitative research method that uses a systematized set of procedures to develop and inductively derive GT about a phenomenon" (p. 24). Other qualitative research methods frequently depend on the use of broad principles rather than the systematic approach, leading to difficulty in their application and interpretation (Myers, 2009). This systematic approach of analyzing data is beneficial in judging, generalizing and comparing the results of GT research (Strauss & Corbin, 1990). We contend that this systematic approach to data analysis provides for rigor and ensures trustworthiness in the emerging theory. Stebbins (2001) supported this argument by differentiating between accidental discovery (serendipity) and systematic exploration that is based on the epistemological and ontological assumptions of the explorer. The latter is sustainable as it is a "broad-ranging, purposive, systematic, pre- arranged undertaking" (p. 4), during which researchers actively and purposefully place themselves in a position to seek for "discoveries" (p. 4) instead of continuing their usual research and passively waiting for the "aha" moments or serendipity to strike (Stebbins, 2001).

Systematic procedures such as simultaneous collection and analysis of data and the constant comparative logic and theory that emerges from data provide GT with rigor that is

not accounted for in other qualitative approaches (Charmaz, 2006). Additionally, being systematic provides the researchers with enough evidence to support their claims (Myers, 2009, p. 111). Glaser and Strauss (1967) extended this thought further by directing the novice researcher to check for the relevance, fitness, workability and modifiability of the discovered GT which attracted researchers and kept them engaged. Charmaz (2006) added that "by adopting GT methods you can direct, manage, and streamline your data collection and, moreover, construct an original analysis of your data" (p. 2).

## Data Depth & Richness

The approach used by grounded theorists to collect rich data is another advantage that is substantial (Charmaz, 2006). Rich data will make the "world appear anew" (Charmaz, 2006, p. 14) because the richness of the data will provide the researcher with concrete and dense fabric to construct a thorough analysis of the data in addition to aiding the researcher to go beneath the surface of the participants' social and subjective life (Charmaz, 2006). Charmaz (2006) contended that the research adventure starts with "finding data" (p. 14). Data will unearth the context and structure of the participants' lives in addition to divulging their feelings, views, intentions and actions (Charmaz, 2006). In order to obtain rich data, researchers are expected to seek thick descriptions (Geertz, 1973) through writing "extensive field notes of observation" (Charmaz, 2006, p. 14), gathering thorough narratives from interviews, and above all "collecting respondents' written personal accounts" (p. 14). The aforementioned approaches to data collection can enhance identifying information but are unsuccessful in providing insights into it (Charmaz, 2006). GT methods provide the tools for "making sense of the data" (p. 15) and refining it to generate insight into the participants' world. Rich data must provide the researcher with enough background about the participants, processes and settings. Moreover, rich data must "reveal what lies beneath the surface" (p. 19) and must expose any changes over time.

Researchers collecting rich data should stay alert to collecting "multiple views of the participants' range of actions" (p. 19). Rich data will enable the researcher to develop analytic categories that facilitates the comparison of data in order to percolate new ideas. Charmaz (2006) espoused that GT can be constructed with different types of data depending on the research topic and questions. The researcher's aim is to enter the participants' lives to see it from inside which eventually illuminates the "unobtainable views" (Charmaz, 2006, p. 24) that outsiders usually assume about the world. Utilizing the logic of GT forces the researcher to go back to the data and forward into analysis to gather further data and to refine the "emerging theoretical framework" (p. 23) which offers the researcher a "fresh look and creating novel categories and concepts" (p. 33).

## Disadvantages/ Limitations of GT as a Method of Inquiry

This section discusses the most common disadvantages of GT. Since the word "disadvantages" might have negative connotations and because GT has positively changed and advanced the way scholars perceive qualitative research, the authors prefer to use the term "limitations" since these limitations can be overcome with time and experience.

## Exhaustive Process

Myers (2009) embraced the notion that novice researchers can become inundated at the coding level with GT, as open coding is a time consuming, tiring and laborious process. The process of abstracting and encompassing concepts is not an easy task. Novice researchers

may become so hindered and absorbed with the coding process that they may lose sight of accomplishing the task of discovering the ideas and themes that emerge from the data. Furthermore, GT usually generates lower level theories that have multiple limitations (Myers, 2009). Annells (1996) forewarned researchers who are planning to use GT that this approach is "not simple" (p. 177) and must not "be hurried" (p. 177), as it may take months to fine tune the theory around the core category. Annells further advised that a mentor should be available to help novice grounded theorists in their journey of inquiry.

## High Potential for Methodological Error

Charmaz (1989) contended that novice researchers using GT may tend to blur methodological lines by selecting purposeful instead of theoretical sampling. She further suggested that it is acceptable to start with purposeful sampling, however, the researcher must revert to theoretical sampling where the "process of data collection is controlled by the emerging theory" (Glaser, 1978, p. 36). Failure to do so will result in a lack of conceptual depth (Benoliel, 1996). Another pitfall the new researcher might face is the use of only one source of data, such as that of interviews. To help circumvent the utilization of one data source, Glaser (1992) recommended undertaking both observations and interviews as part of the data collection process. If a researcher ignores this advice it may cause him or her to focus on the lived experience of the subjects instead of on the social process (Benoliel, 1996).

Additional methodological mistakes such as "muddling qualitative methods, generational erosion, premature closure and methodological transgression" (Wilson & Hutchinson, 1996) may be seen as additional potential limitations to GT research. Evans (2013), concluded that there are valuable "lessons learned" (p. 49) whereby the novice researcher may avoid these potential methodological errors and are worthy of consideration. A detailed discussion of these methodological errors is beyond the scope of this paper.

## Reviewing the Literature without Developing Assumptions

Reviewing the literature is a contentious and debatable issue in GT that sometimes discourages scholars from using the method. Throughout the evolution of GT, researchers have repeatedly debated how best to approach and utilize existing literature within the research study (Bryant & Charmaz, 2007). Glaser and Strauss (1967) unequivocally and overtly encouraged researchers to write the literature review after completing the analysis so as not to contaminate the research findings. Similarly, Corbin and Strauss (2008) affirmed that because "there is always something new to discover" (p. 36), it is unnecessary to review all of the literature before starting the study. According to Glaser (1998), researchers are advised to limit their prior reading before the exploration of the GT; researchers planning to use GT are advised to omit the literature review (Glaser & Strauss, 1967).

Schreiber (2001) argued this position by discussing Glaser's (1998) and Strauss and Corbin's (1998) notion of theoretical sensitivity and the importance of a literature review in guarding against potential biases that could be a threat to the rigor of the study. Theoretical sensitivity refers to the capability to recognize the subtleties and connotations in the data and the associations among the categories (Strauss & Corbin, 1998). In brief, sensitivity is having insight into the data. The researcher becomes sensitive to what is in the data through immersion in it, as well as based on the researcher's prior professional and personal knowledge and experiences. In other words, these insights prepare the researcher to comprehend and interpret data. It is through awareness and acknowledgement of the researcher's background, knowledge and perspective that the researcher is able to see the data without prejudging it or forcing predetermined explanations on it (Strauss & Corbin, 1998).

The authors concur with Schreiber with regards to the significance of a literature review in enhancing theoretical sensitivity, bearing in mind Stebbins' (2001) recommendation that the literature reveals "how these studies leave unexplored certain critical aspects of the phenomenon" (p. 43). Schreiber (2001) supported this stance by asserting that researchers who apply for financial grants must demonstrate a comprehensive understanding of the "state of the science" (Schreiber, p. 58), therefore a review of current (and pertinent) literature is needed for methodological reasons. Other grounded theorists have approached the review of literature as necessary to both "situate your work within the body of related literature" (Bryant & Charmaz, 2007, p. 123), and to "set the stage for what you do in subsequent sections or chapters" (Charmaz, 2006, p. 166).

## Multiple Approaches to GT

In an attempt to legitimize qualitative inquiry, Glaser and Strauss (1967) with their different educational backgrounds and expertise co-developed their book, The Discovery of Grounded Theory. Although the book was a great success, the authors' differing ontological and epistemological assumptions created a fissure in the understanding and application of GT, leading to the creation of at least four different approaches to GT that resulted in confusion among scholars. Glaser was influenced by the quantitative positivist paradigm, whereas Strauss embraced the qualitative interpretive paradigm (Annells, 1997). This tension and division between the original authors created an intellectual debate among researchers and raised several questions about GT method and how to utilize it properly. Strauss and his student Juliet Corbin used the foundational procedures for GT and developed improvised additional tools and techniques that they recommended during the process of coding and memo writings. This new approach surfaced in their book Basics of Qualitative Research (1990). Although Strauss and Corbin's philosophical paradigm was never stated explicitly, their approach is quite similar to that of the constructivist paradigm (Annells, 1997); although there are some basic exceptions that more closely aligns their work with the objectivist paradigm. One example of this is their assertion that the process of "verification" follows very prescriptive guidelines for data analysis. One could argue that when strict data analysis guidelines are utilized theory development may be forced rather than allowed to emerge.

Another conceptual difference between Glaser and Strauss is their understanding of the generated theory. According to Glaser, theory is a momentary product that is still developing, and is subject to further testing and verification by gathering new data. Strauss, on the other hand, argues that theory can be used in practice without the need for further verification, as verification is done in the data during the process of generation (Hallberg, 2006). This conceptual difference leads to a difference in the form of the discovered GT.

Hallberg (2006) argued that the outcome of GT is another source of confusion. Hallberg (2006) added that GT is sometimes presented as a hypothesis to be further tested (Glaser, 1978), in the form of narratives (Strauss & Corbin, 1990) or even through a stories that identify categories and relationships (Charmaz, 2006). Although the product may be different, there is unanimous agreement among scholars with regards to the characteristic of the theory generated. For instance, according to Glaser and Strauss (1967), theory is "either a well-codified set of propositions or in a running text of theoretical discussion, using conceptual categories and their properties" (p. 31). It is worth noting here that a theory is not an "absolute truth" but rather a tentative explanation of a phenomenon. According to Strauss and Corbin (1998), the word "theory" in this context is used to demonstrate the relationships that exist among concepts coming from the data and supports understanding of the social world by illuminating its categories. Simply put, the fact that it explains or predicts something makes it a theory (Strauss &Corbin, 1990). Thus, a theory is a statement regarding

possible relationships among categories about a phenomenon that facilitates the comprehension of a social world.

#### Limited Generalizability

According to Polit and Beck (2010), "generalization is an act of reasoning that involves drawing broad conclusions from particular instances that is making inference about the unobserved based on the observed" (p. 1451). The issue of generalization is less frequently discussed in qualitative research, and is considered complicated and controversial because the main goal of qualitative research is to provide a rich and contextualized understanding of the human experience. Research questions that are explored through GT methods allow for a unique opportunity to extrapolate findings that further explain these experiences. This unique opportunity is due to the nature of GT exploration and its ability to reveal high level concepts and theories that are not specific to a particular participant or setting (Glaser, 2002). Ayres, Kavanagh and Knafl (2003) argued that "just as with statistical analysis, the end product of qualitative analysis is generalization, regardless of the language used to describe it" (p. 881). Polit and Beck (2010) espoused that knowledge is not generated by testing a new theory, but rather knowledge grows through confirmation. They added that confirmations come with systematic replication which leads to confirmatory evidence. Stebbins (2001) stressed that the "main goal of exploratory research is the production of inductively derived generalizations about the group, process, activity, or situation under study" (p. 6). Afterwards, the researcher weaves these generalizations into GT. Herein lies the conundrum: while there are unique opportunities to analyze, interpret, and further interpret the data using GT, what happens if results are not easily generalized? Considering the nature of GT as a qualitative method of inquiry, threats to external validity or generalizability may be limitations of the research being undertaken and warrant consideration by the researcher.

# Applying GT to a Study of Delirium Underrecognition by Registered Nurses: A Brief Case Study

## Background

In the process of shaping the research question on the phenomenon of delirium underrecognition by Registered Nurses (RNs), it became clear that only a few studies explored the problem from a nursing perspective. Moreover, although delirium is a multidimentional concept (Lou & Dia, 2002) most of the literature concentrates on the biomedical nature of the disease. While it is important for RNs to understand the pathophysiological concepts of delirium, it is equally important to understand the contextual factors to enhance RNs' skills of delirium recognition.

It is worth noting that, nurses still do not readily recognize delirium in their practice regardless of the severity of their patients' illness (Saxena & Lawlwey, 2009; Pun & Boehm, 2001; Khan & Bourgeois, 2009; Cole, 2004; Cerejeira & Mukaetova-Ladinska, 2011; Ely & Page, 2011), and there is consistent evidence that older adults admitted to acute care settings are experiencing delirium at rates ranging from 11% to 87% (Aldemir et al., 2001; Ely et al., 2001; Immers et al., 2005; Roberts, 2004; Van Rompaey et al., 2009). Moreover, this phenomenon is not quantifiable, as it focuses on the responses of the RNs who are interacting with older adults to understand the complicated social process of delirium underrecognition.

Furthermore, critical analysis of the literature highlighted the need to approach delirium from a different perspective due to the dearth of literature in relation to

understanding delirium as a contextual phenomenon involving the patient, family and the RNs. Belanger and Ducarme (2011) supported this position in their extensive review of the recent literature, focusing on patients' and nurses' perspectives of delirium. They established that only 17 research articles highlighted the subjective nature of the experience of delirium from the perspective of the patient and the nurses. They added that most of the literature "focused above all on the characteristics, pathophysiology, incidence, etiology, prognosis of delirium as well as on the prevention, detection, evaluation and management" (p. 304). Neville (2008) argued convincingly in favor of expanding the understanding of delirium beyond the biomedical perspective, and suggested considering its personal and relational aspects.

Thus, based on the limited qualitative research literature and the lack of theory to explain the phenomenon of delirium underrecognition by RNs, one of the authors considered the development of a proposal to research this phenomenon. Moreover, he determined that GT would provide the theoretical underpinning to explore this problem. He decided to explore delirium from multiple perspectives (e.g., patient, families, RNs) to enable an understanding of the processes RNs utilize to recognize delirium during their interactions with older adults in acute care settings. To better understand the work of acute care RNs while interacting with older adults, he believes that GT will provide the opportunity to conceptualize and develop a theory to explain the phenomenon and ground it in the data.

## The Research Proposal Using Constructivist GT as a Method of Inquiry

While language, textual data, time and settings are important factors to be considered when analyzing data, the focus of analysis in GT is behavior and its meanings that takes place during social interaction (Wilson & Hutchinson, 1991). The behavior of the RNs and the behavior of older adults, from the perspective of the RNs, will be described, analyzed and conceptualized to construct a theory that provides good explanatory power for the behavior of delirium underrecognition. Furthermore, GT is particularly applicable for exploring this topic due to the nature of this phenomenon, and its deep roots and relatedness to nursing practice (Schreiber, 2001).

RNs working in acute care setting have diverse and heterogeneous perspectives and therefore different constructions of realities as they interact with older adults with delirium. Therefore, the researcher will use constructivist GT to carry out the research, rather than traditional GT approaches as deciphered by Glaser and Strauss (1967) and later by Strauss and Corbin (1990). His decision was based on several factors. First, he is familiar with the concept of delirium and is "not free from the claims of related literature" (Glaser, 1998, p. 69) or of prior assumptions. Second, his philosophical position can be described as relativist ontologically and subjectivist epistemologically. Third, the intensive laborious model of data analysis recommended by Strauss and Corbin (1990) does not fit with the path of concatenation or longitudinal exploration (Stebbins, 2001) that he plans to follow as part of this program of research. Finally, since the main focus of the study is to "make meaning," the constructivist approach is ideal because it requires the creation of a sense of reciprocity in the process of interaction between participants and the researcher when co-constructing meaning. Eventually, he hopes to develop a substantive theory that is grounded in the participants' and researchers' experiences. The constructivist approach also requires the establishment of relationships with participants that explicates power imbalances and attempts to modify these imbalances (Van Maanen, 1991).

The constructivist paradigm of GT embraces the ontological stance of relativism that focuses on local and specific constructed realities (Lincoln & Guba, 2000). Constructivist grounded theorists are more likely to claim that "reality cannot actually be known, but is

always interpreted" (Strauss & Corbin, 1990, p. 22) and acknowledge the mutual creation of knowledge by the researcher and the research participant (Charmaz, 2000, 2006; Schwandt, 1994). This philosophical position corresponds well with his understanding of reality and knowledge development, with the context of delirium underrecognition as a complex phenomenon, and with RNs as clinicians with different backgrounds, education levels, experiences, and understandings. Contrary to the classical GT that follows the objectivist canon of viewing truth as a single, universal and enduring reality, constructivist grounded theorists acknowledge interpretation as the means of construction of co-created realities and the assignment of meaning to social action and interaction (Annells, 1996). This feature will provide the researcher with the opportunity to partake in the interpretation of realities constructed by RNs during the processes of interaction with older adults. Acting like "passionate" participants (Lincoln & Guba, 2000, p. 171), constructivist grounded theorists assist in the reconstruction of multiple voices and perspectives, accommodating the diversity of the RNs interacting with older adults. This process requires authentic engagement with research participants and a rich understanding of their worlds (Mills, Bonner, & Francis 2006). Concerned with subjective meaning, constructivist grounded theorists tend to ask research participants open-ended questions that provide insights into the meanings of their experiences rather than its mere description.

In coding, memo writing and developing of categories, constructivist grounded theorists move beyond the description of overt data, and pay attention to psychological and social assumptions inherent in the data (Charmaz, 2000; Munhall, 2001). Data is not separate from either the observed or the observer but rather reciprocally constructed during interaction. Moreover data is "relativistic, situational and partial" (Charmaz, 2009, p. 138), consequently, data collected from RNs in acute care settings will reflect the influence of those settings on the realities perceived and interpreted by those RNs. Objectivist/classical GT is based on the assumptions of positivism, where it assumes the discovery of data by a neutral observer who is separate from the data and not loaded with preconception (Lincoln & Guba, 2000) which contradicts the contextual essence of his study.

While the objectivist GT emphasizes developing abstract parsimonious generalizations free from contexts of origin but which fit, explain and display relevance to the empirical data of the participants, the aim of the constructivist GT is to gain an "interpretive understanding of the empirical phenomenon" (p. 139) so that the theory constructed will be credible, original, useful, and above all resonates and is relative to the "historical moment" (p. 139). Further, the constructivist GT is a "contemporary revision" of the classical GT (Charmaz, 2009). This revision is done to renew and revitalize the classic GT. Integrating recent methodological approaches challenges the assumptions of generating a general abstract theory and is likely to yield to situated knowledge (Haraway, 1991). Participants' meanings and actions are contrasted with the larger social structure in order to see "current social conventions and power relationships" (p. 131).

A reflexive position may surface when a researcher explores an experience that the researcher can share with the participants (p. 132) which can potentially create a "tone of authenticity" (p. 1330) in the succeeding analysis. The reflexive mode of the contemporary GT keep the researcher engaged, and interacting with data and the emerging idea rather than taking a distanced stance toward their studies (Charmaz, 2006). Charmaz (2006) maintained that lack of reflexivity can lead to surfacing and sprouting of the researcher's own implicit assumptions and interpretation to an extent that it may hold an "objective status" (p. 132). In the objectivist view, reflexivity is treated as another source of data for abstraction and is not considered as a substantial part of the whole research process. Constructivists are expected to demonstrate how their standpoints, positions, and interactions have influenced their

interpretation of data. From this perspective, the claim of objectivity by utilizing the comparative logic of GT cannot be validated.

In his study proposal, the researcher will develop a theory that explains the processes that RNs use to recognize delirium in older adults. Charmaz (2006) maintained that GT has a unique advantage of being able to systematically focus on studying processes by using empirical observations to construct a theory. She added that GT has the potential of developing conditional theories that contextualize certain realities (Charmaz, 2006). Myers (2009) contends that GT is specifically useful for studying "regular, repeated processes" (p. 111).

#### Conclusion

Although GT is "a member of the family of qualitative research approaches" (Glaser, 1998, p. 38), it differs from other qualitative research methods in that it does not only provide meaning, understanding and description of the phenomenon under study, but it also does theory-generation (Glaser 1978). GT approach to data analysis has evolved over the years primarily due to the change in the way we understand and treat knowledge. Facts are not taken at face value without being subjected to analysis and critique. Researchers with different ideas are creating a difference in the advancement of knowledge. Science in general and qualitative research in particular has transformed remarkably since Glaser and Strauss wrote their book *The Discovery of Grounded Theory* in 1967.

GT has been refined over the years to meet the scientific demands of this era. Consequently, Glaser's realist ontology (Annells, 1996) is in total opposite to the relativist ontology of the current qualitative traditions. As a result of this relativist ontological stance, truth is constructed individually and collectively. The process of construction and re construction of the "truth" is ongoing and subject to the interpretation of context (re contextualization; MacDonald & Schreiber, 2001). The relativist ontological stance and its supporters should be credited for keeping GT "viable" and "sustainable" and demonstrate that GT has not "outlived its usefulness" (MacDonald & Schreiber, 2001, p. 42).

Being supporters of GT, the authors have reviewed some seminal and contemporary literature on the topic. Additionally, advantages, disadvantages, and limitations with using GT as a method of inquiry were provided. Finally, using a brief case study, the authors described the suitability of GT as a method of inquiry to explore the phenomenon of delirium underrecognition by RNs. GT is particularly applicable to nursing research because it allows for flexibility and options for data collection, analysis, and interpretation in complex environments such as the one described in the case study. Using GT as a method of inquiry facilitates the researcher's ability to provide insight into the experiences of key stakeholders such as clients, families, and nurses in clinical contexts and is recommended when carrying out qualitative research in these settings.

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