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Development of Grounded Theory in Social Sciences: A Qualitative Approach

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Abstract

Grounded theory (GT) is a general research method that provides the efficient generation of theory from data, which are collected by a strong, sound, and fair research method. It is an inductive methodology that systematically collects and analyzes data for developing theory on human behavior in social welfare perspectives. It is considered as one of the most popular qualitative research methodologies in the world. It is originally developed by two American sociologists Barney Galland Glaser and Anselm Leonard Strauss in 1967 through the publication of their revolutionary book “*The Discovery of Grounded Theory*”. It emphasizes the importance of developing an understanding of human behavior through a process of discovery. Grounded theory has originated in sociology, and at present it has become a key methodological setting in a wide range of other disciplines, such as in nursing, physiotherapy, healthcare, education, anthropology, psychology, management, information systems, software engineering, etc. It is useful both for expert and novice researchers to generate new explanatory theories. This article tries to discuss grounded theory methodology through the discussion of its origin and

development, basic principles, characteristics, advantages and disadvantages, and its usefulness in social science researches for qualitative analysis.

Keywords: Grounded theory, qualitative research, Glaser, Strauss

JEL Codes: A1, B41, C3, C25, P35

1. Introduction

Grounded theory (GT) is the most widely performed research in the qualitative methodology (Bryant & Charmaz, 2007). It is an inductive, systematic, qualitative research method concerned that reflects a modernist ontology (nature of reality) with the generation of theory, which is “*grounded*” in actual data. In GT, research, data are systematically, iteratively, and rigorously collected; and then analyzed to build theory. In GT, it is needed to discover social and psychological processes that accurately interpret, explain, and predict through the necessary theory generation (Glaser & Strauss, 1967; Charmaz & Thornberg, 2021). According to Glaser, GT is “*simply an alternative to positivistic, social constructionist and interpretive qualitative data methods*” (Glaser, 2001).

GT is suited to study phenomena in a given context (e.g., in a particular hospital ward) (Bradley et al., 2007). It is a systematic inquiry of theory construction through the integration of inductive, deductive, and abductive reasoning (Morse et al., 2009). Inductive reasoning occurs when the researcher builds patterns, themes, and categories from the data; based on their interpretation of the data. Therefore, primary theoretical concepts are assumed based on the data that support inductive nature (Thomson et al., 2014). During deductive reasoning the researcher starts with a theory and looks to test or verify it with further research. On the other hand, abductive reasoning involves examining the data and then forming multiple hypotheses that might explain what is ‘observed’ in the data. In GT, it is necessary to test the chosen assumption against further data analysis. GT also emphasizes social processes and non-mathematical interpretations (Nicholls, 2009; Rand, 2013; Khanal, 2018).

Two American sociologists; Barney Galland Glaser (1930-2022) and Anselm Leonard Strauss (1916-1996) are considered as the founders of the GT. According to them, GT is “*the discovery of theory from data systematically obtained from social research*”. In 1967, they have introduced it as an alternative to a dominant positivist research arena in California to legitimize qualitative research through their book “*The Discovery of Grounded Theory*” (Glaser & Strauss, 1967; Glaser, 1998; Bryant, 2021). The book is a dramatic innovation in nursing research that provides the essential tools in healthcare from real-life observations. Both of the authors were working together on a study of staff’s handling of death and dying patients in hospitals (Glaser & Strauss, 1967; Charmaz, 2006). At the beginning, they have mentioned theoretical sampling and then they have described a process of generating theory from data. For the welfare of the patients, they have developed a more linear approach to the research methodology and a set of methods for collecting, coding and analyzing data that are systematic. They have reached in a decision on the aims, principles, and procedures associated with the implementation of the method (Glaser & Strauss, 1967; Glaser, 1992a; Mohajan, 2018). They have emphasized on the view of producing new theory from data and have resisted applying the existing theory. A researcher can create a theory that is important in certain contexts from observations and the observers’ consent (Glaser & Strauss, 1967; Charmaz, 1995).

In the early 1960s in the USA, hospital nurses rarely talk with seriously ill patients who are dying. Glaser and Strauss, and their research team have observed how dying happened in a variety of hospital settings. They have supplied data for explicit analytic treatment and have produced theoretical analyses of the social organization and temporal order of dying. After long conversations they have constructed their analyses of dying and have generated systematic methodological strategies. Finally, they have articulated these strategies and have advocated for developing theories from research grounded in data rather than deducing testable hypotheses from existing theories (Glaser & Strauss, 1967; Charmaz, 2006).

GT has evolved significantly over time and grounded theorists offer new epistemological and ontological perspectives contextual to specific time, people, culture, place, and situation (Ralph et al., 2015). There are four major changes in GT, such as from the positivism of Glaser and Strauss analysis i) to the symbolic interactionism, ii) to pragmatism of Strauss and Corbin, iii) to

the constructivism of Charmaz (Glaser & Strauss, 1967; Strauss & Corbin 1990; Charmaz, 2008), and iv) to the feminist GT of Judith Wuest (Wuest, 1995). A completed GT must possess the following criteria: a close fit with the data, usefulness, conceptual density, durability over time, modifiability, and explanatory power (Glaser & Strauss, 1967; Glaser, 1992a).

2. Literature Review

A literature review is an overview of the previously published works on a specific topic that provides an overview of existing knowledge. It allows a researcher to identify relevant theories, methods, and gaps in the existing research (Creswell, 2007). It is a secondary source and does not report a new or an original experimental work (Gibbs, 2008). A good literature review can ensure that a proper research question has been asked and a proper research methodology has been chosen (Baglione, 2012; Torraco, 2016). Glaser and Strauss have not supported the existence of a literature review prior to research analysis. According to them, review the literature and plan in details for the research process is nothing but valuable time spent, as the quantitative researchers do. Their suggestion is “*literally to ignore the literature of theory and fact on the area under study, in order to assure that the emergence of categories will not be contaminated*” (Glaser & Strauss, 1967; Heath & Cowley, 2004).

Kathy Charmaz and Robert Thornberg have focused on i) introduction of the logic of GT, with emphasis on how researchers can use it to construct theory, ii) detailing of criteria for quality in the major forms of GT, and iii) analysis of how constructivist grounded theory through the interviewing process and coding, and developing of their theoretical concept of double victimizing (Charmaz & Thornberg, 2021). Judith Holton and Isabelle Walsh have studied the GT with Glaser. They observe that “*GT is not philosophically biased and is fully epistemologically and ontologically neutral, although at the same time it is methodologically and epistemologically flexible*”. On the other hand, classic grounded theory contains some philosophical assumptions that are critical realists (Holton & Walsh, 2017). Naomi Elliott and Anne Lazenbatt confirm that a GT approach provides nursing with a viable means of generating theory grounded in the realities of everyday clinical practice. In nursing, it is extremely

important, as it allows the researchers to engage the clinical practicum to construct a meaningful research (Elliott & Lazenbatt, 2005).

Haradhan Kumar Mohajan has highlighted on the root cause of the GT (Mohajan, 2018). In another paper he has discussed four waves of feminism, where each wave indicates a specific cultural period and involvement of women (Mohajan, 2022b). Also in another paper he has briefly discusses the variants of feminism (Mohajan, 2022b). Virpi Timonen and her coauthors have realized that GT method is widely applied, but frequently misunderstood. They have enhanced purification of core principles supporting existing GT approach to make GT more comprehensible and accessible for new researchers. They also show that the GT method is articulated as the rules of: i) taking the word “*grounded*” seriously, ii) capturing and explaining context-related social processes, iii) pursuing theory through engagement with data, and iv) pursuing theory through theoretical sampling (Timonen et al., 2018).

Udaya Mohan Devadas and his coauthors have highlighted the differences of Glaserian and Straussian GT versions in terms of the paradigmatic dimensions, formulation of research questions, analysis procedures used, usage of literature, sampling procedures, and the procedures for validating the resultant theory. They have tried to resolve how the alternative GT methodologies should be applied in researching Human Resource Development (Devadas et al., 2011). Mohamed El Hussein and his coworkers have provided an outline of GT, and then describe the appropriateness, advantages, and disadvantages for the research design. They have also presented the strengths and limitations of this method in nursing research (Hussein et al., 2014).

3. Methodology of the Study

To rationalize the selection of a research methodology, a researcher must understand its philosophical origins and unique characteristics (Rieger, 2019). It should reflect the researcher’s own ontological and epistemological standpoints, i.e., understanding of reality and how best to obtain truth about it (Hallberg, 2006). The methodology is influenced by a set of philosophical principles that influence research design and decision making during the research procedure

(Birks & Mills, 2015). Theory is an explanation that “*systematically integrates various concepts through statements of relationships*” and explains a phenomenon. The term “*grounded*” indicates that the theory is grounded in the data (Strauss & Corbin, 1998). GT is generally considered as positivist/post-positivist philosophical roots. Therefore, GT is a systematic and flexible constant comparative approach for theory constructing inquiry and is typically used when a theory is not available to understand or explain a process that occurs over time (Creswell, 2007; Charmaz, 2014). When two authors Glaser and Strauss have developed qualitative social research on GT in 1967, quantitative research was dominated in the research area (Glaser & Strauss 1967; Bryant, 2002).

In the study we are confirmed that GT is a suitable qualitative research methodology that incorporates guidelines for simultaneous data collection and analysis to develop theories about social processes that are grounded in real-life experiences (Charmaz, 2006; McClement & Harlos, 2008). First, we have taken attempt to discuss briefly the origin and development of GT. Then we have tried to highlight the basic principles of GT. Characteristics of GT is discussed to know the nature of GT research. Benefits, disadvantages, and strengths of GT are highlighted for the enrichment of the activities of our study.

The paper is prepared on the basis of secondary data sources. The essential and necessary data are collected from previous research articles of reputed journals, published books of world famous authors, handbooks of renowned scholars, conference papers on recent important topics, websites, etc. (Mohajan, 2020; Mohajan & Mohajan, 2022). In the study we have tried to maintain the reliability and validity throughout the research (Mohajan, 2017). To make an article meaningful, a researcher needs both quantitative and qualitative research methodologies. William Neuman beliefs “*ethics begins and ends with you, the researcher*” (Neuman, 2011). Ethical issues are essential for both quantitative and qualitative researches. But ethics play a crucial role for conducting and gathering a qualitative data analysis (Punch, 1998).

4. Objective of the Study

The main objective of this study is to present an overview of GT in qualitative research approach. Some other minor objectives are;

- to explore the emergence of GT in research,
- to discuss the characteristics of GT, and
- to highlight the strengths, advantages, and disadvantages of GT.

5. Origin and Development of GT

At the beginning of the 20th century it is believed that all the good theories had been discovered. Also the researchers confirm that all research works should be possible only by quantitative empirical approaches. But the social sciences realized that it is difficult to measure human behavior in the simpler quantitative methods, therefore qualitative research methods are developed to understand the human behavior and social world (Goulding, 2002; Cullen & Brennan, 2021). In the early decades of the 20th century, some early ethnographic workers have worked on anthropology. Since World War II, few researchers were striving to develop theories, models, and explanations about society. Also some sociologists of Chicago School have worked on a new approach to understand of human cultures. Their harvest is considered as qualitative research (Vidich & Lyman, 2000; Berthelsen et al., 2018; Mohajan, 2018).

The qualitative research has a condemnation that it is imprecise, unsystematic, prejudiced and disordered. The GT has flourished based on this condemnation and becomes popular world-wide (Charmaz, 2006). Barney Glaser and Anselm Strauss are considered as the father of GT. They have defined GT as the discovery of theory from data (Glaser & Strauss, 1967). Glaser came from Columbia University, who has experience of positivistic quantitative research, was initially hired by Strauss, and has the goal of producing explanatory “*theories of the middle range*”. He has pursued to apply this training to qualitative research (Glaser, 1992b; Strauss & Corbin, 1990; Charmaz, 2000). On the other hand, Strauss has studied at the University of Chicago with its tradition of symbolic interactionism and ethnographic qualitative approaches of inquiry, such as observation and intensive interviewing (Strauss & Corbin, 1998). Therefore, Strauss has brought

“the pragmatist philosophical study of process, action, and meaning into empirical enquiry through grounded theory” (Charmaz, 2000).

Merger of two different fields has inspired for the development of GT. Union of both of the authors, Glaser and Strauss, and field development and perform of extra ordinary works are called an *“ironic conjunction of careers”* (Glaser & Strauss, 1967; Kelle, 2007). They have realized that qualitative research before 1960s was impressionistic, anecdotal, unsystematic, and biased, and mostly ignored human problems and research questions that did not fit positivistic research designs (Charmaz, 2008; Strauss, 1987). They begin their collaborative work at the University of California-San Francisco where they were hired to guide nurses in their research. Use of GT in nursing and healthcare research has been started since 1960s. Strauss recruited Glaser to aid him in the study of patients dying in hospitals (Glaser & Strauss, 1967; Glaser, 1998; Duchscher & Morgan, 2004). These influencing factors have combined to create a rigorous methodological process that had a positivist direction (Bryant & Charmaz, 2007). Glaser and Strauss have conducted intensive fieldwork in several terminal care environments, such as patients and their family members, nurses, and healthcare professionals. They have discovered that the interaction between a hospital professional and a patient depended on the level of awareness each had regarding the patient’s prognosis (Glaser & Strauss, 1967; Bryant, 2021).

Later, Strauss has brought notions of human agency, emergent processes, social and subjective meanings, problem-solving practices, and the open-ended study of action to GT (Charmaz, 2009). After more than a half century of Glaser and Strauss presentation, GT has become the most used qualitative research design in the world (Birks & Mills, 2015). At present, GT spreads across many research areas, such as in education, sociology, social work, nursing and medical research, anthropology, law, management, computer and information sciences, etc. (Strauss & Corbin, 1994; Timmermans & Tavory, 2012). The two researchers have studied the chronically ill patients and have tried to establish interactions between healthcare professionals and dying patients. The theory has derived from the collected data and then develops them by collecting, coding and analyzing (Glaser & Strauss, 1967). They have used existing theories to generate hypotheses, and then test them empirically (Charmaz, 2003).

Ultimately in the 1990s, Glaser and Strauss have parted and rarely seen them in same academic activities. The emergence of the two approaches of the co-founders, labeled by “*Glaserian*” and “*Straussian*” respectively. Glaser kept on focusing on the earlier concept and remained consistent with it (Glaser, 1978, 1992b). Glaserian version is considered as “*traditional or classic*” grounded theory. His work encompasses from “*Theoretical Sensitivity*” to “*Emergence vs. Forcing: Basics of Grounded Theory Research*” (Bryant & Charmaz, 2007; Kelle, 2007). In this version, theory is grounded in data, and data reveals theory. It is objectivist due to its focus on emergence of theory from the data (Glaser, 1998; Charmaz, 2016). It defines theoretical sensitivity as remaining open to what is actually happening and not having any preconceived opinions toward what may emerge from the data (Glaser, 1978). The researcher is passive exhibiting disciplinary restraint in this version and coding of data and the constant comparison of data enable patterns to emerge (Morse et al., 2009).

On the other hand, Straussian version is viewed as the evolved version of GT (Mills et al., 2006). Strauss has moved his mind towards verification, rather than focusing on the earlier version of GT (Strauss, 1987). Straussian version emphasizes that the theory is historically rooted, which led it to be accepted as pragmatic and relativist (Mills et al., 2006). It extends from “*Qualitative Analysis for Social Scientists*” to Strauss and Corbin’s “*Basics of Qualitative Research*” (Corbin & Strauss, 2008; Babchuk, 2011). It describes as the active involvement of the researcher with the data and what is happening in it. It organizes data to generate a theory that is interpreted by the observer. In this method, researcher is active, basic social processes need not be identified, and data is structured to reveal the theory (Morse et al., 2009).

Strauss has started to work with his new collaborator, Juliet Corbin and has made some significant changes to the methodology. He refers Juliet Corbin as his research teammate. By the time of his death in 1996, Strauss has published four books related to GT. Juliet Corbin and Strauss; both procedures reflect the same theoretical interpretation of a phenomenon generated from data using core methodological guidelines (Corbin & Strauss, 2008). Later in 2006, Kathy Charmaz, a student of Glaser, has developed her own brand of constructivist methodological revisionism (Charmaz, 2006, 2009). It openly addresses the role of the researcher in the analysis

procedure and the creation of the theory. It underlines the current interaction between the researcher and the research that highlights the co-construction of the theory. Charmaz method states that it is one of pragmatism and symbolic interactionism (Charmaz, 2014, 2017). It rejects Glaserian notion of discovering the theory (Kenny & Fourie, 2015).

Glaser strongly prohibited the literature review on GT. On the other hand, Strauss and Juliet Corbin support literature review from the beginning in enable comparisons and theoretical sensitivity (Glaser, 1978; Corbin & Strauss, 2008). Since the 1990s, over the past thirty years theoretically repositioned versions of GT have been advanced that are more congruent with epistemological, theoretical, and methodological developments (Clarke, 2005; Bryant & Charmaz, 2007). The fundamental elements and core tenets of GT approach are i) coding, ii) development of ideas, iii) continuous comparison of data, iv) theoretical selection, v) theoretical saturation, vi) theoretical integration, and (vii) use of memos to reflect collected thoughts of researchers (Cullen & Brennan, 2021).

Some scholars have developed family of GT methods, such as positivist, postpositivist, constructivist, objectivist, postmodern, situational, and computer-assisted (Creswell, 2007; Charmaz, 2009). A methodological spiral is present between postpositivist and constructivist approaches, and both have placed GT as the most postpositivist on these spectrums (Mills et al., 2006). Constructivist versions of GT are developed by Kathy Charmaz (Charmaz, 2014). Later, Charmaz, Antony Bryant, Adele Clarke and some other scholars have developed constructivist, feminist, critical thinking, and postmodern interpretations of GT (Mills et al., 2006). With the point to several of these aspects we can comment that these methods form the backbone of GT methodology (Hood, 2007).

6. Basic Principles of GT

Grounded theory (GT) approach is basically a step towards conceptual thinking and theory building rather than empirical testing of the theory (Khan, 2014). It deals with only inductive approach rather than deductive approach of inquiry (Glaser, 1992b). Keith F. Punch has defined the GT as “*GT is not a theory at all. It is a method, an approach, a strategy and theory will be*

developed inductively from data” (Punch, 1998). Kathy Charmaz defines GT as “*GT begins with inductive data, relies on comparative analysis, involves simultaneous data collection and analysis, and includes strategies for refining your emerging analytic categories*” (Charmaz, 2016). To successfully complete GT research it is needed to follow some systematic steps as: 1) initiating research question, 2) data selection, 3) data collection, 4) data analysis, and 5) conclusion of the research (Hussein et al., 2014).

There are seven basic principles in GT as follows: i) start research with a broad research focus, ii) delay literature review until later stages of research, iii) conduct simultaneous data collection and analysis, iv) conduct constant comparison method, v) keep memos, vi) theoretical sensitivity, and vii) theoretical sampling (Charmaz, 2006; Qureshi & Unlu, 2020).

Principle-i allows, a researcher not to use any predetermined research questions but use only broad research focus (Charmaz, 2006). Principle-ii indicates, literature review is controversial in GT research. Glaser has suggested that GT researchers should delay literature review as much as possible to stay as neutral as possible towards the existing research and the theories (Glaser, 1978). On the other hand, Charmaz, Corbin and Strauss have recommend literature review for sound theoretical basis (Charmaz, 2014; Corbin & Strauss, 2015). Principle-iii lets to constantly compare emerging codes of the researcher within the same data item and across the same data set. As a result, the researcher aims to generate properties of each category within the theory (Glaser & Strauss, 1967; Unlu 2018). Principle-iv allows researchers to constantly compare their emerging codes within the same data item and across the same data set (Corbin & Strauss, 2015; Unlu, 2018). Principle-v mandates researchers to follow memo writing principle that enables researchers to clarify what they meant or why they created certain codes in their analysis (Bryman, 2012). Principle-vi is described as being open to what emerges from the data and also needs to see possible connections between the emerging findings and the literature (Glaser, 1978; Urquhart, 2013). Principle-vii is parallel to the theory development rather than representing the population. It states that the theory decides where and what to sample is (Glaser & Strauss, 1967; Charmaz, 2006).

7. Characteristics of GT

GT is a systematic process consisting of several flexible strategies for constructing theory through analyzing qualitative data. It has a distinct style and form, so that it is easily recognized. It is most frequently focused on a behavioral concept, such as trust, resilience, caring, and coping (Glaser & Strauss, 1967). It is viewed as a theory and a method of data collection that enhances in-depth inquiry (Creswell, 2014). It is subject to reinvention, rooted in professional practice, and suited to “*capturing the complexities of the context in which the action unfolds*” (Locke, 2001; Walker & Myrick, 2006; Morse et al., 2009). It aids as both “*a way to learn about the worlds we study and a method for developing theories to understand them*” (Charmaz, 2006). It aims to develop a substantive theory through comparative analysis and coding procedures (Howell, 2012).

In GT, the existing literature is not used as a theoretical background, but rather as data to be used by the analytic strategies of the research (Creswell, 2014). GT researchers do not start their research with a theory. But the theory is produced from the continuous interaction of the data collection, data analysis, and consequential theory (Corbin & Strauss, 2015). It is one of the data collection approach in qualitative research methods which is totally based on data rather than try to emerge theory from data (Khan, 2014). Therefore, the data of GT are continuous over time, experiential, readily conceptualizable, and of adequate variation (Schreiber & Stern, 2001). In GT, the developed theory leads for data recollection and reanalysis, and seeks to make sense of the data collected to determine its meaning and significance. GT seeks to make sense of the data collected to determine its meaning and significance (Parker & Roffey, 1997).

GT offers explicit analytic guidelines, ways of seeing data, control over the research process, and the promise of completed projects (Charmaz, 2012). According to Barney Glaser, GT is “*a general methodology of analysis linked with data collection that uses a systematically applied set of methods to generate an inductive theory about a substantive area*” (Glaser, 1992a; Cullen & Brennan, 2021). Distinguishing characteristics of GT are as follows (Glaser, 1992b; Strauss & Corbin, 1998; Charmaz, 2003):

- focusing on a process and trajectory that results in identifiable stages and phases,

- simultaneous collection and analysis of data creation of analytic codes,
- data collection and analysis occur simultaneously,
- uses gerunds indicating action and change
- social processes discovered in the data,
- categories developed from data and not by preexisting conceptualizations,
- abstract categories constructed inductively,
- theoretical sampling used to refine categories,
- writing analytical memos as the stage between coding,
- analytical memos used between coding and writing,
- use of gerunds indicating action and change,
- a core category that ties stages and phases of the theory together, and
- writing the integration of categories into a theoretical framework.

To prepare GT papers, researchers have to see very carefully the background, research problem, literature review, and research question in the studies that are very general in nature. So, a GT analyzer should not enter a study with preconceptions, biases, and prior hypotheses. S/he can try to enter the study as nearly *tabula rasa* as possible (Nathaniel, 2020). GT is a general discussion of the substantive area, rather than an in-depth discussion of a specific phenomenon. The in-depth literature review occurs only after the theory is discovered (Glaser, 1998).

9. Benefits, Strengths, Limitations, and Disadvantages of GT

GT is one of the most popular research approaches in social sciences. It has both strengths and benefits that enrich the society and the researchers feel comfort when they work on GT. On the other hand, GT has limitations and disadvantages as like other researches. Now we briefly highlight the strengths and benefits, and also disadvantages and limitations of GT.

9.1 Benefits and Strengths

Strengths and benefits ensure the researchers about the reliability and validity of a research (McCaslin & Scott, 2003). Grounded theory has an enormous success in the nature of data

collection, analysis, and theory building on the basis of practical experiences of the researchers. The GT researchers gather huge information of the participant's feelings, opinion, insight and perception of phenomena under investigation (Creswell, 2014; Bryant, 2018). During the three decades since the development of GT, in the 1990s it has made a significant impact on the development of social science. It not only provides meaning, understanding and description of the phenomenon under study, but also does theory generation (Glaser 1978). GT strives to understand and explain human behavior through inductive reasoning processes. It has enormous benefits and strengths to develop qualitative social science research (Elliott & Lazenbatt, 2005). It can identify the situated nature of knowledge, as well as the contingent nature of practice. According to Glaser, GT is "*enjoyable, meaningful, informative, and empowering*" (Glaser, 1998).

Strengths: GT is a well-suited and well-established analysis method for generating substantive theory (Strauss & Corbin, 1998; Milliken, 2010). It can determine what actually happens. It expedites the research works and makes them manageable, efficient, and exciting (Charmaz, 2016). It can respond and change as conditions that affect behavior change. It provides a strong intellectual justification for using qualitative research to develop theoretical analysis (Goulding, 1998). It tries to develop a substantive theory that increases the understanding of the researchers (Corbin & Strauss, 2008). It offers an explicit statement of how to conduct qualitative analysis. It serves as both a way to conduct research, as well as a research position (Edwina & McDonald, 2019).

GT familiarizes readily to the studies of diverse phenomena. It offers a practical and flexible approach to interpret complex social phenomena (Charmaz, 2003). GT provides for intuitive appeal, fosters creativity, offers systematic approach to data analysis, runs potential to conceptualize, and gathers rich data (Hussein et al., 2014). Although GT is researcher bias, but this bias affects narrowly in the outcomes and research outcomes become richer than any traditional research. GT method is student oriented and manageable for a thesis (Charmaz, 2016).

Benefits: GT has multiple benefits in research, such as ecological validity, and discovery of novel phenomena. Ecological validity refers that research findings can be accurately represented

in real-world settings. GT provides explicit, sequential guidelines for conducting qualitative research, and shows ways to rationalize and integrate data collection and analysis (Charmaz, 2003). It helps a researcher to get started, stay involved, and finish the running project with success. It fosters to see the data in fresh ways and explores the ideas about the data through early analytic writing (Charmaz, 2008). It is a useful method to explore a new domain, or a domain without a dominant theory and for constructing a theory in new field (Muller & Kogan, 2012). It aims to formulate, test, and reformulate prepositions until a theory is developed, which is “*grounded in or developed inductively from a set of data*” (Glaser & Strauss, 1967).

It helps to define, explicate, and conceptualize what is happening in the data. It also helps to develop a sympathetic phenomenon that cannot be elucidated with prevailing theories and paradigms. As it provides a systematic and clear process of data collection and data analysis; research problems can be analyzed in-depth. It facilitates studying processes at multiple levels of analysis and fosters making invisible processes transparent. It not only enables thousands of researchers to complete their studies but also informs other types of qualitative analysis (Charmaz, 2014, 2016). GT is an elegant, useful, and valid research method. It tries to understand the problems of society (Charmaz, 2016).

GT have provided a powerful argument that legitimized qualitative research as a credible methodological approach in its own right rather than simply as a precursor for developing quantitative instruments (Glaser & Strauss, 1967). It is an excellent method for avoiding a premature conclusion about the domain. In some research areas, such as medicine and forensics GT helps to avoid confirmation bias. It provides a rich and contextualized understanding of the human experience (Hussein et al., 2014). It can identify the situated nature of knowledge, as well as the contingent nature of practice. It is important for the professional development of nurses, teachers, computer operators, etc. (Heath & Cowley, 2004). It does not make assumptions, but adopts a more neutral view of human action in a social framework (Simmons, 2006). It provides an outcome to develop a concept of social phenomena that is not pre-formed or pre-theoretically developed with existing theories and hypotheses (Engward, 2013).

9.2 Limitations and Disadvantages

Research in GT is time consuming, exhaustive, and difficult to conduct. For example, open coding in GT is a time consuming, tiring, and laborious process. GT requires in-depth interviews from many individuals with knowledge of the phenomenon under investigation consequently, time consuming and laborious (Creswell, 2007). It gathers large amounts of data that often difficult to manage. It does not provide detail collection techniques, but rather outlines an analytic process (Charmaz, 2000). It fails to recognize the embeddedness of the researcher. So that it obscures the researcher's considerable agency in data construction and interpretation (Bryant & Charmaz, 2007). In GT, an expert researcher faces no serious difficulties, but a novice researcher often faces (Simmons, 2006).

Novice researchers may become hindered and absorbed with the coding process. They also tend to blur methodological lines that result in a lack of conceptual depth (Benoliel, 1996). Multiple approaches to GT are major faults to the researchers. Glaser and Strauss separately preceded to the two the different variants. On the other hand, Charmaz has developed constructivist grounded theory (CGT). The issue of generalization is less frequently discussed in GT, and is considered complicated and controversial (Glaser & Strauss, 1967; Charmaz, 1995).

Presentation of research findings is not straightforward and research can be biased. In GT, the researcher will end up with a comprehensive description of a phenomenon, but will not have generated a well-constructed theory. New GT researchers often find it hard to gain an oversight of the method, for example, theoretical sampling and saturation are frequently misunderstood to them (Timonen et al., 2018). GT is created on the basis of positivism/objectivism and therefore, suffers from internal misalignment (Bryant, 2002). In GT, there are no standard rules to follow for the identification of categories. It is not a useful method for testing a hypothesis, or for trying to prove or disprove a theory (Suddaby, 2006). In GT, abduction teaches us to test the theory at its weakest point (Awbrey & Awbrey, 1995).

10. Conclusions

In this study we have observed that grounded theory is one of the most revolutionary and widespread methodologies in qualitative research methodology that is a step towards conceptual thinking and theory building rather than empirical testing of the theory. Grounded theory is the most widely used and established rigorous qualitative approach in the social sciences. It has been applied in multiple disciplines and to a variety subjects, such as in sociology, nursing, healthcare, education, physiotherapy, anthropology, psychology, management, information systems, etc. Two US social scientists, Barney G. Glaser and Anselm L. Strauss have developed grounded theory in 1967 through the published of their revolutionary book “*The Discovery of Grounded Theory*”.

Grounded theory is a qualitative analysis that characterizes a cognitive process and each individual has a different cognitive style. It represents systematic methods of gathering, analyzing and conceptualizing data so that a theory can be built to explain social activities. It is the most widely used approach in the social sciences that supports “*credibility*” instead of “*validity*” and “*reliability*”, i.e., that findings are trustworthy and believable in grounded theory.

This study reflects the core principles of the original grounded theory methodology. We have tried to provide the strengths, benefits, disadvantages, and limitations of grounded theory. In the 21st century, popularity of the grounded theory is growing day by day, and more researchers in the worldwide are doing research in this field confidently.

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