The methodology of classic grounded theory: considerations on its application in nursing research

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Abstract
Objective: to discuss the role of supervisors and students using Classic Grounded Theory within the context of nursing research degrees such as a Masters, Ph.D. or Professional Doctorate.

Method: it is a reflexive analysis, organized into three sections: 1) Overview of Classic Grounded Theory; 2) The role of supervisors; and 3) The role of students.

Results: Grounded Theory is one of the most widely used qualitative research methodologies in nursing. However, in practice different approaches are used, leading to much confusion. Grounded Theory methodology as originated by Glaser and Strauss emphasises openness to what is happening in a substantive area and its procedures guide researchers in discovering the main concern of participants based on emergence rather than preconceptions.

Conclusion: it encourages researcher autonomy and supervisors need to supervise in a way that maximises this, while being aware that Grounded Theory is best learned experientially. Students should trust that the methodology will enable them to develop a multivariate theory accounting for how participants resolve or process their main concern.


A metodologia da teoria fundamentada nos dados clássica: considerações sobre sua aplicação na pesquisa em enfermagem

Resumo
Objetivo: discutir o papel dos orientadores e estudantes que usam a Teoria Fundamentada dos dados no contexto da pós-graduação em enfermagem, como mestrado, doutorado ou doutorado profissional.

Método: utilizou-se análise reflexiva, organizada em três seções: 1) Visão geral da Teoria Fundamentada nos dados; 2) Papel dos orientadores; e 3) Papel dos estudantes.

Resultados: a Teoria Fundamentada nos dados é uma das metodologias de pesquisa qualitativa mais utilizadas na enfermagem. No entanto, na prática, diferentes abordagens são empregadas, gerando confusão. A metodologia Teoria Fundamentada nos dados, desenvolvida por Glaser e Strauss, busca compreender o que está acontecendo em uma área substantiva, e seus procedimentos orientam os pesquisadores na descoberta da principal preocupação dos participantes com base em dados emergentes, não em dados pré-concebidos.

Conclusão: a Teoria Fundamentada nos Dados incentiva a autonomia de pesquisadores, e os orientadores precisam adotar um estilo de supervisão que maximize o desenvolvimento da teoria, sabendo que a Teoria fundamentada dos Dados é melhor aprendida por meio de experiências. Os pesquisadores devem confiar que a metodologia permitirá que eles desenvolvam uma teoria significativa, contando a forma utilizada pelos participantes para resolverem suas principais preocupações.

LA METODOLOGÍA DE LA GROUNDED THEORY CLÁSICA: CONSIDERACIONES SOBRE SU APLICACIÓN EN LA INVESTIGACIÓN EN ENFERMERÍA

RESUMEN

Objetivo: discutir el papel de los supervisores y los estudiantes que utilizan la Teoría de Grounded Theory en el contexto de los grados de investigación de enfermería, tales como en la Maestría, doctorado académico o Doctorado Profesional.

Método: análisis reflexivo, organizado en tres secciones: 1) Visión general de la grounded theory clásica; 2) El papel de los supervisores; y 3) El papel de los estudiantes.

Resultados: la Grounded Theory es una de las metodologías de investigación cualitativa más utilizadas en enfermería. Sin embargo, en la práctica se utilizan diferentes enfoques, lo que genera mucha confusión. La metodología de la Grounded Theory como originada por Glaser y Strauss enfatiza la apertura a lo que está sucediendo en un área sustantiva y sus procedimientos orientan a los investigadores a descubrir la principal preocupación de los participantes basada en la emergencia y no en los preconceptos.

Conclusión: fomenta la autonomía de los investigadores y los supervisores deben supervisar de una manera que maximice esto, siendo conscientes de que la teoría fundamentada es mejor aprendida experimentalmente. Los estudiantes deben confiar en que la metodología les permitirá desarrollar una teoría multivariable que explique cómo los participantes resuelven o procesan su principal preocupación.


INTRODUCTION

Grounded Theory (GT) is one of the most widely used qualitative research methodologies in nursing comprising a set of steps that are rigorous and systematic, guiding researchers from the time they enter the field to when they leave. The potential of GT methodology is to provide an action guide through greater understanding of the phenomenon, which is very important in nursing and health field.

GT originated in sociology, from a study of the dying process in hospital. Very quickly, there was divergence in the methodology. There is evidence from their students, that from the start Glaser and Strauss did not share an understanding as to what GT was.

There are three main versions of the methodology: Classic GT (Glaser); Straussarian GT (Corbin and Strauss) and constructionist GT (Charmaz). These different versions have originated in response to what is seen as GT’s failure to take account of postmodernism, in particular to debates around the nature of reality, resulting in GT being criticised for being “objectivist”. However, GT is not objectivist but conceptual in nature. These issues are discussed elsewhere. This article focuses on classic Grounded Theory as originated and elaborated on by Glaser and other publications, abbreviated throughout as GT.

The aim of this article is to discuss the role of supervisors and students within the context of research degrees such as a Masters, Ph.D. or Professional Doctorate when students have decided to use GT methodology. The open and emergent nature of GT is emphasised throughout together with practical advice for supervisors and students on how to handle the supervisory relationship to their mutual benefit. This is best achieved when the relationship is based on respect for autonomy and where the supervision is supportive and encouraging. First, the methodology of GT is briefly outlined.

OVERVIEW OF CLASSIC GROUNDED THEORY

GT at its core is very simple. It is based on peoples’ natural tendency to theorise and on the idea that behaviour is patterned. GT assumes that the social organization of life is such that individuals are always in the process of resolving relevant problems. The aim of those using this methodology is to pick up on these patterns and conceptualise them. For this reason, the unit of analysis is behaviour and not people. The purpose of GT is to provide a theoretical explanation of how the main concern of participants is managed. Main concern refers to something of importance to individuals or to a worry. It is a general methodology that may be used with qualitative or quantitative data, but is mainly used with the former.

One of the defining characteristics of GT is its openness. The meaning of openness in GT is not to reject prior knowledge and external advice in following an unrestricted exploration toward...
studying whatever comes up as interesting but to focus on what is of interest to participants, remembering that the goal of GT is to generate a theory that accounts for their patterns of behaviour which are problematic and relevant for them. Openness is about trusting in theory emergence, which means being open to what is going on in the substantive area, while tolerating not knowing what the study will be about. Glaser cautions against researching a professionally preconceived problem rather than trusting that the problem will emerge.

Researchers cannot know prematurely what is going on in the field. However, the requirements of universities, ethics committees and funding bodies often demand that a research proposal include specific research questions or objectives. While this seems to be at variance with GT, the proposal can be written in such a way that it maintains flexibility in the research questions and design. For example, the former could be written in a non-specific, general way, using broad research questions or objectives. It is not at all unusual in qualitative research for the focus of the research to change.

Data collection

The mantra in GT is that “all is data”. There are potentially multiple sources of data available to researchers. Hartman and Gibson maintain that researchers should use diverse sources of data in any one study, including interviews, observations, documentaries, biographies/auto biographies and documentaries. If interviews are used, Glaser recommends that these be conversational in nature and should be short, on the understanding that researchers may return to the same participants on several occasions. However, pragmatism may deem it necessary that participants are interviewed at length.

Theoretical sampling

In GT, data are analysed as soon as they are collected, before going back into the field to collect further data. Sampling is theoretical whereby questions to ask or the topics to explore are based on what is emerging from the data and cannot be predetermined. This involves jointly collecting, coding, and analysing data and deciding what data to collect next and where to find them, to develop the theory as it emerges. The idea is that researchers are not collecting the same data over and over based on asking the same questions. This minimises data collection.

Coding

Analysis is not a description of the “voice” of participants, but an abstract theoretical explanation of what they are doing. The explanation is conceptual, not interactional. Generating concepts is covariant with data collection and analysis, and memoming on the categories. The core process in GT data analysis is coding: substantive coding, comprising of open and selective coding and theoretical coding.

Substantive coding

The aim of open coding is to generate an emergent set of categories and their properties which fit, work and are relevant for integration into a theory. To achieve this, the data is analyzed line-by-line and each incident is coded with a key word, which summarizes sections of data. However, it is important not to code each line, since this leads to the generation of too many codes and will cause overwhelm. A code may be found in a sentence, a paragraph or in a page. When coding, researchers ask four questions: (1) What is this data a study of?; 2) What category does this incident indicate?; 3) What is happening in the data?; and 4) What is the participants’ main concern?

Researchers using GT are coding for patterns of behaviour. Coding is simply the naming of such a pattern. Coding for a particular pattern stops once saturation is reached, that is, when incidents yield no new properties of the category. The category has earned its way into the theory.

Central to GT is constant comparison, where every piece of data is compared to every other piece and the collection of further data is modified according to the advancing theory. This completes the cycle of data collection, analysis and theory production. It is its own constant verification, continually modifying the emerging theory by constant comparison. Theoretical sampling and constant comparison help ensure that only concepts based on the data earn their way into the theory.
Once the core category emerges, then open coding is changed to selective coding, where researchers only collect and code related. The core category guides further data collection and theoretical sampling. This continues until no new categories or properties of categories emerge. The core category is central to the theory and integrates all the other categories. It must reoccur frequently in Table 1.

Table 1 - Examples of classic Grounded Theory in nursing research. Florianópolis-SC, Brasil, 2017

<table>
<thead>
<tr>
<th>Article</th>
<th>Purpose</th>
<th>Core variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>M. Khademi et al./Nursing Ethics (2016)15</td>
<td>To examine the main concern in humanistic nursing area and how the way it is solved and resolved by Iranian nurses in acute care setting.</td>
<td>Unspiring response to situation</td>
</tr>
<tr>
<td>N. Winters/Journal of Emergency Nursing (2016)16</td>
<td>To explore and describe the process that nurses go through to become and remain emergency nurses.</td>
<td>Seeking status</td>
</tr>
<tr>
<td>J. Thomas et al./Nurse Education Today (2015)17</td>
<td>To explore the impact of the first clinical placement on the professional socialisation of adult undergraduate student nurses.</td>
<td>Finessing incivility</td>
</tr>
<tr>
<td>Gallagher et al./International Journal of Nursing Studies (2015)18</td>
<td>To understand nurses’ end-of-life decision-making practices in intensive care units in different cultural contexts.</td>
<td>Negotiated reorienting</td>
</tr>
</tbody>
</table>

Theoretical coding

Within qualitative research a framework is the conceptual underpinnings of a study. This is no different in GT, where the purpose of the framework is to integrate the theory by conceptualizing how the substantive codes relate to one another as hypotheses. Like everything in GT, this framework itself emerges in what is known as theoretical coding. This process takes the emerging theory to a higher level of conceptualization, yet keeps the theory grounded in the data.

Memoing

Memos are so central to GT that if researchers are not writing them, then they are not doing GT. They are the theorizing write-up of ideas about the substantive codes and how they relate to one another. This is a constant process and should be done throughout the research. Ideas about naming concepts, their relationship to one another and the core are developed in memos. They raise the conceptual level and help to keep track of ideas to be sorted later into the theory. Despite the over formulation by some writers, researchers are free to memo as they wish. There is only one rule for memoing: interrupt whatever is being done to write one, otherwise the idea may be lost and for this reason may be thought of as “moment capture”. Memos are eventually sorted and the theory is ready to be written.

Integrating the literature

Once the core category begins to emerge, then the literature is read, since the relevant literature is now known. In deciding what literature to review, students decide where they want their theory to have the most impact. This is usually within their profession and this is the literature that is reviewed first.

Writing the theory

Glaser advises reading other monographs and papers for their little logic figuring out how they are constructed. In writing the thesis, he suggests starting by introducing the nature of the problem and outing the general properties of the core category. This means presenting the core concept in terms of its sub-core categories. In GT, the challenge is to write conceptually. This means relating concept to concept and not to people. The theory can be quite dense and therefore should be broken up by providing illustrations of the categories. These might be in the form of direct quotes or vignettes. These are for illustrative and not evidentiary purposes. The end product is a multivariate theory, accounting for the preponder-
ance of behaviour of how participants resolve or process their main concern.

Finally, GT comes with its own criteria for judging rigour. Fit defines how well the concepts and theory reflect what is going on in the substantive area. This means that categories must be indicated by the data. For a theory to work, it must predict or explain what will or is happening within the substantive area. Relevance means that the concepts and theory are relevant to the people whose behaviour it explains. Modifiability means that the theory can change to accommodate new data.

THE ROLE OF SUPERVISORS

Many of the characteristics of a good supervisor of students using GT have been discussed but overall this should take the form of supportive supervision. How this can be done and maintained is discussed next. What supervisors know about GT is very variable. Presented here are three main supervisory types though there are likely many variations within each typology: 1) The “know nothing” supervisor; 2) The “I know best” supervisor; and 3) The “methodology expert” supervisor.

There are those who know little or nothing about GT but encourage their students to study it and are humble enough to learn from them. They can provide very effective supervision. Once they accept that students know more about the methodology than they do and as their understanding of GT develops, they are likely to give them the autonomy to do their research according to GT methodology. The second type of supervisor, who usually has been trained in Qualitative Data Analysis (QDA), knows a little bit about GT methodology but may confuse the different versions. They may try to impose their views on students, forcing them to apply the methodology their way. This has the effect of alienating students, leading to frustration and conflict. They have the potential to do the most damage by undermining students’ confidence and creating a dependency that is the antithesis of GT.

Supervisors who have been trained in GT are in the optimal position to supervise. They are most likely to be able to guide students and pace the study of GT. Their understanding will ensure that students produce a multivariate theory, provided of course students follow their advice and can conceptualise. They usually have experience in using or teaching GT, constantly study the methodology and update their knowledge.

If supervisors are unsure about any aspect of GT, then they are encouraged to refer periodically to an expert in GT as their students may inadvertently drift into QDA. Experts can be found from their publications on GT from www.groundedtheoryonline.com. The most effective supervisors are likely to be those who are open, permissive, facilitative and promote student autonomy.

Not knowing what students are researching can be very difficult for supervisors to tolerate, since many do not like such uncertainty. If supervisors are not comfortable tolerating cognitive confusion in themselves and their students, then they are unlikely to successfully supervise students using GT. This means not rescuing students from confusion by suggesting codes or telling students what the study is about since this is likely to lead to the use of preconceived concepts and forcing the data, diluting the full power of GT. The most effective strategy is to trust in the methodology to deliver, while supporting students in doing the same.

Supervisors need to be alert to the possibility of students using preconceptions since this will lead to forcing the data. It is likely that they are preconceiving the problem or asking preconceived questions if they are not getting any data. Other indicators of preconception include participants not answering questions asked or changing the subject to talk about what is really of concern to them. Also, students not seeing patterns in the data. Encouraging students to engage in theoretical sampling and constant comparison are strategies for dealing with these issues. This also means not using an interview guide or topic list, if interviewing is the main method of data collection.

However, supervisors need to be pragmatic as students may not have the confidence to enter the field without such a guide. As students become more confident, they usually engage fully with theoretical sampling. Disciplinary interpretations as to what a methodology is or should be has limited understanding of GT and has contributed to thinking of it as another qualitative method rather than one that stands alone. It is essential therefore that supervisors are aware of their own disciplinary, methodological and experiential preconceptions and biases. If they have studied qualitative methodologies, then they are likely to have some unlearning to do, since many of its tenets do not apply to GT. Supervisors should not preconceive their students.

GT gives students autonomy and ownership and contradicts the usual way of doing qualitative research which preconceives the problem with a
research question, an interview guide and a theoretical or conceptual framework. The thesis traditionally begins with an extensive literature review and the issues to be investigated further usually emerge from the literature. This means not forcing students to pursue a problem that ought to exist as suggested by the literature. The main concern or issue facing participants cannot be known in advance and must be facilitated to emerge. This is why writing a literature review at an early stage is not recommended since it may lead to preconceiving the problem as well as using preconceived concepts. In this way students can avoid the conceptual grab of the literature.

It is essential that students try to understand the action in the substantive area from the perspective of participants. In the spirit of discovery, openness, and autonomy students need to develop their own concepts. It is imperative that supervisors realise that students must do their own coding without interference. This maintains and supports their autonomy.

It is essential therefore that supervisors do not tell students how to see the data, tell them what concepts to use or jointly code with them. It is not the role of supervisors to agree with the generated concepts, since they do not have access to the data in their entirety and therefore are not able to name patterns of behaviour. Rather, it is their role to continually challenge students to raise the conceptual level.

Encourage students to use in vivo codes if relevant but above all encourage them to look for patterns in the data. One way to ensure this is to ask them: what are the indicators of the concept? This will guard against conceptual folly, where every incident is given a name. This is often because of a misinterpretation of what line by line coding.

The likely consequence of this is that students end up being overwhelmed by hundreds of codes. One student came to a GT seminar having generated over 600 codes from three interviews, while another had 1,000 from just one interview. Both examples are because of misunderstanding line by line coding or supervisors thinking that they know how to code the GT way and imposing this on their students. Students need constant reminding that the unit of analysis is behaviour and not people. Encouraging students to continually ask four questions of the data as outlined above, will aid analysis. As students become more practiced at coding and constant comparison, supervisors should challenge them to engage in conceptual refit to ensure more grab, fit or relevance.

In generating the core category and writing, there are three issues that supervisors need to be aware of: incident tripping, full conceptual description and logical drift. Incident tripping happens when students describe at length the core category or any category, using incidents, instead of conceptualising the pattern of behaviour. With supervisors’ help, this can be prevented by ensuring that students engage in constant comparison, as discussed, as well as using theoretical codes to integrate the theory. This minimises description, while ensuring conceptualisation and data saturation.

Full conceptual description is similar but here there is no attempt to distinguish between concepts and their properties. Also, there is no use of theoretical codes to integrate hypotheses. This can be dealt with in a similar way to incident tripping whilst also encouraging students to write in a way that relates concept to concept rather than merely describing each one. Logical drift happens when students assume that an emergent code is the core category and stop theoretically sampling.

They may then logically conjecture other categories and their properties to weave into the theory, often without even being aware that this is what they are doing. The end product is often preconceived, conjectured or ungrounded. Encourage students to stay open to other possible core categories.

Challenge students as to why they think they have found the core category by asking them to demonstrate how it integrates the other sub-core categories. This could be done by means of diagrams or by writing a brief summary of the theory. If it is not central and does not integrate the other sub-core categories, then it is not core and some other category should be tried. Asking students to talk about the theory in terms of its concepts helps theoretical integration. Diagramming the theory is very effective at getting them to see how concepts relate to one another.

To integrate the theory, the final step of GT is sorting, where the memos are integrated. How to do this is fully discussed elsewhere. It is important for supervisors to understand that students need to do this themselves without interference, since only they know the concepts and how they relate to one another. Supervisors will realise that this step has been missed if the theory is not integrated, not multivariate, lacking breadth and depth.

Writing the theory is always a challenge for students and supervisors should familiarise themselves with how this is done. Supervisors should
constantly challenge students to raise the conceptual level of their theory, while ensuring that the theory is eminently readable. It is imperative to remind students that the theory is independent of time, place and people. Thinking of the general implications of the core category and theory may help students to write conceptually.

THE ROLE OF STUDENTS

Student autonomy and accountability in communicating supervisor expectations is important for adherence to the GT methodology. How this can be done and maintained is discussed in this section. Students should remain accountable and take ownership for producing a GT. They ought to learn early on in research to be risk takers and to work independently, as well as in collaboration with GT experts. There are five key issues for success while navigating the supervisor-doctorate student relationship: 1) A mutual understanding of the purpose of seeking a research degree; 2) Selecting a supervisor who will move the GT process forward; 3) Ensuring that the university accepts the choice of GT, as an appropriate method; 4) Ongoing evaluation of the committee to maintain focus toward successful completion; and 5) Publishing the GT with a co-author.

It is imperative that in studying GT, students read original texts, since secondary sources may distort or misrepresent the methodology. Students must be accountable for the full completion of GT research and take an active part in facilitating an effective supervisor-student relationship.

There are four recommendations for students to take in establishing and maintaining an effective supervisor-student relationship: 1) Commitment to GT methodology with consideration to institutional requirements and independently seeking opportunities to gain knowledge and understanding; 2) Open communication and trust with supervisors throughout the educational journey; 3) Confidence to articulate clearly all aspects of GT relevant others, and to write throughout the process; and 4) Commitment to disseminating the theory through scholarship. Students can reasonably expect a similar commitment from supervisors.

If supervisors are not supportive of students using GT or display an obstructive attitude, then it is advisable to seek a new supervisor. It is advisable for supervisors and students to establish a detailed timeline for reviewing and revising work to progress the research. At times, students may need to speak up and be politely assertive in order to remain true to GT methodology while also meeting institutional requirements.

The supervisor-student relationship has increased potential for success while working with GT if both adhere to spirit of the methodology, which requires students to remain accountable and take ownership. Choosing this methodology can be intimidating and frustrating at the onset unless students are resilient, persevere, remain committed, and in discussion with their supervisor, seek out every opportunity to learn about GT, such as GT seminars and methodological training. Inclusion of the four recommendations above is necessary to establish and maintain an effective supervisor-student relationship and to minimize frustrations and delays in completing the thesis.

Students are encouraged to adhere to the methodological stages of GT as discussed. Students are encouraged to maintain theoretical sensitivity by minimizing preconceptions and letting the concepts emerge through careful analysis. When addressing preconceptions, “remember one does not throw out everything they have learned. The researcher just suspends it when using GT methodology, especially when coding and theoretical coding”.

Students should reasonably expect the type of supervision that will build self-confidence and support autonomy. Open communication between supervisors and students starts early. Extensive and meaningful critique and formative feedback is a student expectation to advance conceptualisation and theory development, as well as understanding of GT. At a minimum, this will include being listened to in a respectful way.

Students should have the support from supervisors to attend a Grounded Theory Institute (GTI) seminar or similar and establish a working relationship with a CGT Fellow, if supervisors do not have expertise in GT. Observer participation in a GTI seminar at the beginning of studies is a worthy foundation for advancing understanding of GT an early stage. It would be beneficial for supervisors and students to attend a seminar together. There are five areas for students to consider when choosing GT methodology: 1) Seek expertise; 2) Engage in community; 3) ’Just do it’; 4) Know self; and 5) Balance challenge and support.

GT methodology is usually taught as part of a broader course in qualitative research but academic institutions might consider adding a GT course to doctoral programmes due to the increased number of students wishing to use this methodology. If this
is not possible, students benefit greatly by having support and mentorship from a GT expert. This could be as a seminar facilitator or guest lecturer. In addition, it is highly recommended for students to find a mentor to ensure that a GT thesis is successful. The GTI has a list of GT Fellows and provides seminars to support students in their study of GT.

In conclusion, students are encouraged to embrace the autonomy that GT offers by seeking out supervisors who will listen, remain open to the uniqueness of the methodology, and offer support in a trusting and respectful way to ensure timely completion of the thesis. Students are charged with maintaining accountability and taking ownership of the GT thesis through commitment, communication and confidence to defend it and leave the academic institution with a longstanding relationship with supervisors and the potential for future research collaboration.

CONCLUSION

As has been emphasised throughout, GT is characterised by its openness to what is going on in a substantive area and is the antithesis of pre-conception. It is based on recognising patterns of behaviour and naming them using concepts. As discussed, it is important to acknowledge that there are other versions of GT that may legitimately be used to investigate issues of importance in nursing. For example, if students want to study a particular topic or value the co-construction of data, then a constructionist GT may be more appropriate. However, students and their supervisors should realise that in doing so, openness may be compromised since students enter the field with a defined research question. The most effective supervisors are likely to be open and permissive rather than controlling, stifling or disapproving. Openness to discovery encourages students to fully realise the power of GT and theory development. Permissiveness in supervisors encourages autonomy and experiential learning in students. In turn, students need to be open to discovery, and trust in emergence. It is imperative that they learn GT experientially and thoroughly study the methodology. A good and mutually respectful relationship between students and supervisors will prepare students to be independent researchers remembering that a Ph.D. is a process of empowerment to achieve intellectual autonomy and creativity, as well as developing personal self-confidence.

REFERENCES


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