

## Building a Classic Grounded Theory: Some Reflections

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### Abstract

This article focuses on some of our reflections of using processes inherent within classic grounded theory methodology to build knowledge surrounding military personnel who experienced combat-related limb-loss from the Iraq and Afghanistan conflicts. We conclude that instead of adding to the issue of mixing different grounded theory perspectives, researchers should instead follow guidance from one approach to avoid becoming perplexed as each strand produces a different product. This article provides our own philosophy and compatibility with a classic grounded theory approach, and we encourage researchers to capitalise on the wealth of exemplar theories within the Grounded Theory Review journal and to engage with Barney Glaser's books.

**Keywords:** Classic Grounded Theory, Grounded Theory, Combat-Related Limb-Loss, Military Trauma, Combat-Trauma.

### Introduction

Classic grounded theory methodology can be embraced by both quantitative and qualitative researchers (Glaser, 1998, 2008), however in nursing research it has tended to be used for its power in generating knowledge using a qualitative approach to build theories that are discovered or constructed from the data (Glaser 1998; Chun Tie et al., 2019). Specifically, nursing researchers have tended to embrace grounded theory to study areas relating to clinical practice or education (See for example Li et al., 2015 and McCallin, 2011). As a nurse, I (the first author will be referred to in the first person in the article to show that this article is based on his doctoral work) had a prior interest in the effects of amputation on people's wellbeing, and spending part of my youth as a military child, this interest expanded to understanding the psychosocial impact of combat-related limb-loss on military personnels' physical and mental health. I focused specifically on military personnel from the Iraq and Afghanistan conflicts as there was little insight available in the extant literature for this group of people.

Grounded Theory is, arguably, one of the most misunderstood and misinterpreted methodologies (Olshansky, 2015). Specifically, Timonen et al. (2018) argued that the lack

of understanding often existing among researchers relates to the core processes of grounded theory; for example, confusing the general ideas of saturation in qualitative research with that of theoretical saturation (a core tenet of grounded theory), which leads to researchers applying procedures thus making it more difficult to facilitate a grounded theory product. Bryant (2021) also reinforced the misunderstanding that often occurs when researchers may not be aware of the methodology's inherent sampling procedures, where data collection begins purposively followed by theoretical sampling. Ultimately, I chose to adopt a classic grounded theory (CGT) approach and this article provides our tussles with some aspects relating to the methodology and uses a reflective style of writing that may prove to be useful to other researchers contemplating the use of CGT in their own research endeavours.

Our journey began reading the SAGE Handbook of Grounded Theory (Bryant & Charmaz, 2007) that provided us with the perspectives and uses of the methodology across disciplines. However, it was overt that there were also various approaches to doing grounded theory research, and further exploration of the extant literature led us to a plethora of critical research available that discussed the different "strands" of GT. We read the contentious issues surrounding the methodology, but importantly, a seminal piece of work that settled our own decision-making around GT as whole was written by Glaser (2014) that concluded "GT methods are just different, not better or worse" (p. 3). However, one does need to engage with the GT debates to align themselves with a set of ideological assumptions that includes philosophical standpoints.

### **What is the philosophy of classic grounded theory?**

In practice, Ash (2022) clearly identified his difficulties as a novice researcher using CGT in defending his doctoral work and being able to persuade others that CGT is sufficiently rigorous without discussing its philosophical assumptions. Moreover, Nathaniel (2011) highlighted the fact that neither Glaser nor Strauss discussed the method's philosophical underpinnings, which, consequently, has led to researchers debating and placing the methodology in a range of positions. For instance, scholars have sought to apply philosophical foundations based on the type of grounded theory approach adopted whilst also considering their own beliefs around how knowledge can and should be generated. Therefore, since its inception, grounded theory (GT) methodology continues to be debated and re-modelled, but three main variations are generally seen amongst the literature, which can generally be placed under the umbrella of: traditional/classic GT developed by Glaser (1978, 1998) evolved GT formulated by Strauss and Corbin (1990, 1998, 2014) and constructivist GT associated with (Charmaz, 2006,; 2014). A more recent version named transformational GT (Redman-MacLaren & Mills, 2015) has appeared in the literature combining grounded theory's systematic processes and participatory action research methodology, emphasising a critical realist ideology that seeks to move the focus from participants' actions to the involvement of underlying social structures and aims to promote positive social change (Goulding, 2017). This means that power in the research process is disentangled, and participants are viewed as co-researchers involved in all aspects of research design, data generation, analysis, and dissemination of research findings. Although there is a substantial amount of research promoting participant involvement in research, transformational GT as a modernist version of Glaser and Strauss' original intentions for the

methodology (and Glaser's significant amount books since the 1970s), has not received much discussion or critique in the wider literature.

The GT approaches can be somewhat confusing to researchers who are unfamiliar with grounded theory (Kenny & Fourie, 2014) and requires immersion in the extant literature to fully understand the philosophy and the different analytical procedures inherent in each approach. Scholars have attempted to label CGT across the spectrum as realist-positivist (Weed, 2016) critical realist (Holton & Walsh, 2017; Howard-Payne, 2016) and pragmatist (Nathaniel, 2011). Glaser (2005) refuted that grounded theory is entirely interpretivist and advocates that CGT is a *general* methodology that can use qualitative or quantitative data and can accommodate differing epistemological and ontological standpoints. However, criticism has been made at CGT for being objectivist and viewing the researcher as a passive and neutral observer who does not consider their impact on data analysis and interpretation (Bryant & Charmaz, 2007; Charmaz, 2008). However, Simmons (2006) argued that neutrality in CGT is in fact its advantage as the researcher seeks to avoid making assumptions about human action and adheres to a set of rigorous processes. Moreover, Glaser's original training in quantitative research, which was greatly influenced by a positivist epistemology might have had an impact on his teachings of GT about the need for an adherence to a set of systematic processes inherent within CGT methodology. Consequently, McCall and Edwards (2021) posited that the insistence on following the fundamental steps to formulate a classic grounded theory may be viewed as objectivist in nature.

Singh and Estefan (2018) summarised that CGT favours a researcher who believes that there is a reality to be discovered in substantive area of interest and can comprehend the reality, as well as having a strong affinity to allowing reality to emerge if the researcher seeks to minimise personal preconceptions and gives the data a chance to speak. Having read a significant amount of CGT literature, I was theoretically sensitive to the belief that the social world consists of patterns of behaviour, and I was in agreement with a critical realist perspective that truth was not the aim of my CGT study; it was more about providing plausible explanations for military personnels' behaviours (Breckenridge et al., 2012). Consequently, I focused on the commonalities that existed amongst the data that the men and women offered to me to further my understanding of what appeared to be of most importance to them. Moreover, I supported the belief that ontological and epistemological viewpoints could lead to me pre-framing the study or preconceiving what was really going on in the lives of military personnel by imposing a specific lens, or theoretical perspective on the data. I tussled with the debate in my own mind, and we settled with the notion of "subtle realism" as described by Hernandez and Andrews (2012) and Hammersley (1992) by accepting the relativist position that assumptions are a human construction but advocated reasonable confidence in knowledge claims rather than certainty.

### **What is and what is not classic grounded theory?**

Simmons (2022) argued that researchers using general qualitative data analysis techniques can have the tendency to use grounded theory terminology and Glaser (2009) refers to this as "jargonising" where researchers attempt to legitimise their research, when, for example, they do not follow the iterative nature of CGT principles. Moreover, Glaser (1999) added

that a classic grounded theory only exists when it has utilised the full “methodological package” (p. 836). Similarly, Lowe and Tossey (2017) wrote about how authors cite using CGT methodology in their studies, but have modified or mixed approaches e.g., combining qualitative data analysis procedures and GT. They explained further that this has led to the erosion of existing methods and procedures, causing confusion and advocate that writers should be more explicit with their research design (proposing that researchers define their methods as pseudo-GT). I was in a fortunate position at the start of my doctoral journey as I was invited to attend a CGT seminar in Ireland to present my research proposal as a trouble-shooter/novice. The leaders of the workshop were two fellows from the Grounded Theory institute who studied the method with Barney Glaser. This happened at a time when I was juggling different methodologies that could guide my research. I was offered advice and support about CGT methodology and how it was distinctly different to other versions of grounded theory, as the researcher focuses on uncovering the main concern of the population being studied and how this concern is continually being resolved or processed (Glaser, 1978, 1992, 1998). I found the methodology fascinating and my continued immersion in the literature enabled me to justify using CGT and focus on the purpose of the study, which was to develop a theory about the main concern (problem, issues) for military personnel living with combat-related limb-loss and the common behaviours that they used to resolve this concern (see Vander Linden, 2022). This met my initial aims of the PhD project, to build a theory based on these men and women’s lives, to understand what was problematic for them, and what they were actively doing to deal with their difficulties.

### **Grasping CGT processes**

The main difference I noted between CGT and other versions is that the researcher seeks to identify latent patterns of behaviour in the data through using the in-built processes of coding (open and selective), constant comparison, theoretical sampling, constant memoing and theoretical coding. In the beginning, the coding process was difficult, and I struggled consistently to collect and analyse data simultaneously. Stern (2009) indicated that a major issue with grounded theory studies is the inadequacy of data pertaining to small sample sizes, a lack of theoretical sampling (see Urquhart 2013) or the use of the constant comparative method (CCM). I found the CCM very useful to keep me focused on identifying possible relationships between different codes, concepts, and categories. For example, a pattern of behaviour emerged that linked acceptance with a property of tolerating powerlessness that showed how military personnel focused on their abilities rather than their deficits. This strategy enabled these men and women to work towards accepting the things that they could not control and come to terms with an altered life trajectory. Therefore, it was the CCM that also enabled us to become fixated on the commonalities in men and women’s behaviour that identified avenues for further data collection through theoretically sampling follow-up interviews and documentary research methods, to fill gaps in our understanding of the substantive area. For instance, some military personnel behaved in ways that hampered their rehabilitation by using emotion-focused strategies, such as denial and rumination. We discovered that these strategies were used to help them cope with their physical, psychological, and social losses, and further theoretical sampling (using more focused questions to participants) made us aware that giving themselves time was an important aspect of their journey towards accepting their new situation.

The most effective method of keeping track of participants' behaviours was using post-it notes on a whiteboard that gave us the freedom to move the notes around and we could start to visualise a theoretical structure. Identifying patterns in the data was not easy but reading *Getting out of the data* (Glaser, 2011) changed our thinking and affirmed that we were in a state of "data overwhelm" (Yarwood-Ross, 2019). We were not theorising to elucidate these men and women's main concern, and how they were processing or resolving this concern by figuring out the core category. After a period of re-focusing data collection and analysis, we discovered that these men and women had several concerns but *how to deal with their physical, psychological, and professional losses* encapsulated their primary issue and *facing losses* emerged as the best fit for how military personnel worked to process their main problem. Pinning down the main concern and the core category was uplifting as it allowed us to focus the grounded theory and provide its remit.

Glaser (2007) has consistently stated that "all is data" (p. 1) for conceptualisation meaning that interviews are not the only source of data available to a researcher and Morse and Niehaus (2009) indicated that observations and documents can be used to extend theory development. We re-evaluated the sources of data available to us and capitalised on documentary research methods that included autobiographies, documentaries, a theatrical play, YouTube videos and blogs. Coffey (2004) supported the use of autobiographical works (including documentary sources and videos) that can be considered as a rich data set to explore and analyse people's lives, and Mathias and Smith (2015) are noteworthy in their belief that autobiographies provide revealing intimate details from an individual's perspective. Also, from grounded theory's origins, Glaser and Strauss (1967) made it clear that "different kinds of data give the analyst different views or vantage points from which to understand a category and to develop its properties" (pp. 65-66) and this is further supported by the wider literature (Andrews et al. 2012; Gelling, 2011; Ralph et al., 2014). Therefore, we rationalised using documentary research methods by explaining that it provides insights that may not be readily available from another single data source. Nonetheless, it is important to point out that managing all the data available to me was difficult, so we made the decision to use interviews as primary data and the other sources to corroborate developing concepts through theoretical sampling.

### **The notions of preconception**

Limiting preconceptions can be hard to grasp for novice researchers using the CGT method, but it requires them to be acutely aware of any form of preconception that might occur at the start, during and end of a study. Moreover, Glaser (2002) has promoted in his life-long teachings of the classic method that having faith in the methodology is required, and it is but one way of doing research amongst many other different methodologies available to guide a project. Therefore, the researcher needs to make their own methodological decisions about whether CGT can fulfil the aims and objectives of their intended study.

Researchers may hold some assumptions about how to conduct research that may stem from their clinical background or training in research methods. Holton and Walsh (2017) explained that these can be an issue when conducting CGT research, as the focus is heavily placed on allowing the emergence of knowledge discovery rather than shoehorning

the theory into what ought to be found in field of study. Preconceptions may also relate to prior understandings about research design leading to the perception that CGT methodology is “unscientific” (Levers, 2013, p. 1) due to its general focus on building theory mainly from qualitative data, coupled with a limited awareness of the approach’s mechanisms and goals.

The question that arose in my mind is: Can researchers with a strong background in the topic of interest use CGT and how does a researcher minimise their preconceptions? I was fortunate because I had little experience around combat-related limb-loss but I did have considerable knowledge of disease-related limb-loss through my work as a nurse. I questioned whether my assumptions would get in the way of me using CGT, so I turned to the literature for guidance. Authors have suggested that researchers who are steeped in understanding their field do have the option of using an alternative methodology, but the CGT approach can be adopted if the researcher is willing to minimise the impact of their preconceptions through focusing on meanings from the data (Chalmers, 2018; Glaser, 2012). This is highly achievable as CGT’s in-built processes i.e., coding, constant comparison, memoing and theoretical sampling are purposely used to avoid pre-empting what is the concern of the participants in the study. Again, it is more the case that researchers need to “let go” of their desire to know in advance what is going on in the field and trust in emergence (Artinian, 2009; Glaser, 1978, 1998; Tossy et al., Brown, and Lowe 2017). However, trusting in emergence has been criticised by (Charmaz, 2008) for assuming that the analytical process will “magically generate ideas” (p. 159) and that the concepts built do not allow interpretation.

However, one way to reduce subjective bias in a CGT project is through a researcher increasing their theoretical sensitivity which is a term originally put forward in Glaser’s *Discovery of grounded theory* book in 1967 as the moments where one can notice important data segments in the developing theory (Chun Tie et al., 2019). Strategies to build upon theoretical sensitivity by comparing the concepts/categories that have been generated against relevant literature, ensuring that the researcher’s theory guides the direction of the literature reviewing process (see Hoare et al., Mills, and Francis 2012). In this way, the literature becomes another source of data to strengthen the emerging theory.

Second, space to demonstrate continuous reflexivity in the study is essential through the process of theoretical memoing as a means for the researcher to document their inklings about the possible connections between incidents, codes, properties, and categories (Chametzky, 2013). In my study, I think I benefitted most from memoing as the freedom gave me room to offload a brain full of coding and I would often write memos that may only be a couple of sentences, to ones that were several pages long. I often used diagramming to try and draw the connections in my analysis and would also write memos that provided an audit trail of the methodological decisions I had made, demonstrating an element of reflexivity. I called the connections between codes “light bulb moments” as they often appeared at the most inconvenient of times, such as when trying to get to sleep or when busy grocery shopping. I cannot overestimate the importance of carrying a notebook and pen wherever you go as you do not want to miss a moment of insight in your analytical thinking. Consequently, memoing facilitated movement of military personnels’ individual stories to understanding more about their patterns of behaviour beyond description to a more abstract level of conceptualisation (Lehane, 2019). Methodological memoing also

demonstrated the quality of the grounded theory through the audit trail of decisions we had made throughout the research. Mohajan and Mohajan (2022) supported this move for researchers to show an element of reflexivity and critical thinking skills.

Finally, another important point for theoretical memoing was to ensure that they were titled and dated as a means to capture the ideas and reflections chronologically, so that future sorting of the memos into a theory was less problematic and provided a storyline of the emerging insights. I found that memoing provided me with such freedom to write whatever came into my mind at that time in a creative manner. Memos explained aspects of a concept/category but also figured out the properties, connections, and relationships between them to understand more about military personnels' latent patterns of behaviour.

### **Where did the extant literature fit into the grounded theory process?**

Engaging with the literature using GT methodology is contested. The usual way of carrying out a study is to undertake an initial literature review to discover a gap in understanding to formulate research questions and contribute *new* knowledge to the field (Konecki, 2018). I tussled with debate surrounding the role of literature in a grounded theory study (Nathaniel, 2019; Yarwood-Ross and Jack, 2015) and found that it is a common misconception that the literature is completely ignored in a CGT study and the need to withhold engagement is to allow the researcher to focus on knowledge generation from the incoming data. Moreover, from a CGT perspective, engaging with literature on the phenomenon of interest is avoided as it is viewed as a source of preconception (Glaser, 1998) and the researcher should wait until the main concern and core category are discovered. This allows an element of creativity in the methodology and reiterates that the key factor is the *timing* of the literature review, which ensures that key existing literature is compared with the researcher's developing grounded theory. Another resolution to this contentious issue is to conduct what Urquhart (2013) and called a "non-committal literature review" (p. 29) to become informed about theories and concepts but avoiding an in-depth deep dive into the knowledge base, ensuring that it is the researcher's developing theory that defines the relevance of the initial literature review. In doing so, researchers can avoid forcing extant theoretical ideas into the analysis that do not fit with the emerging theory. I was fortunate to discover during my scan of the existing literature that the area of combat-related limb-loss in the Iraq and Afghanistan conflicts was relatively under-researched from a qualitative viewpoint. This was advantageous as Weerawardena and Sullivan Mort (2006, p.22) advised that grounded theory is useful when studying "uncharted waters" (p. 22) or gaining a new perspective, which enabled me to justify my research area that warranted further investigation. As previously stated, a traditional literature review will enable a student to state research question(s), however, I learnt from a very early stage through reading Glaser's (1998) book *Doing grounded theory: Issues and discussions* that unlike other qualitative approaches (including other remodelled versions of GT), a CGT study enters the field with a research *interest* as opposed to a defined research question(s). Other scholars support this way of conducting research to avoid masking what is really occurring in participants' lives (Nathaniel, 2019). Classic grounded theory starts with open questions to allow participants the chance to tell their stories with as few interruptions and assumptions as possible on the part of the researcher. Therefore, in avoiding the literature

(as far as possible) and keeping my preconceptions to a minimum helped to avoid influencing what mattered to military personnel.

I remember a time when a colleague asked me: “if you don’t know what you’re looking for in a study, how can you be sure you will find something novel?” I pondered this question for some time but trusted the notion that through using CGT principles, I could at the very least provide a fresh perspective in the substantive area. Literature pertaining to military personnel with combat-related limb-loss have tended to research a particular angle e.g., Jeppsen et al., Wood, and Holyoak (2019) focused specifically on finding out about “resilience” and Keeling et al. (2023) concentrated on body image. Although these factors may be important, my study did not aim to find out *in advance* what may be the main issues for veterans. Therefore, I did not have defined research questions, and simply had nothing more than a general interest in the experience of combat-related limb-loss, which ultimately led to initial interviews being very broad and unstructured. I entered the field with grand tour questions (Olson 2006; Simmons, 2022) such as: “how are you?” and “are you able to tell me your experiences of combat-related limb-loss?” that gave men and women control of their interviews and an opportunity for free speech. This strategy aimed to ensure that the conversations with them were relevant.

### **Saturating the data**

Saturation in qualitative research more broadly denotes a point where the researcher can halt further data collection. It is usually a judgment call when a researcher can demonstrate data adequacy meaning that more sampling will not generate further insight (Yang et al., Lidong, and Zhang 2022). More specifically, Morse et al. (2014) supported the notion of data redundancy and repetition, but Low (2016, p.132) identified different types of saturation that exists in the literature: data saturation, thematic saturation, and theoretical saturation, but advocates a pragmatic approach that allows a practical assessment of when saturation is reached and avoids the idealistic beliefs that it is a position where no new insights are discovered.

A question which often evokes some anxiety and difficulty for researchers relates to question of how many qualitative interviews are enough to warrant claims of reaching saturation? It is problematic, but considered essential for calculating sample sizes, however O’Reilly and Parker (2013) added that the decision regarding saturation is most definitely contested. In an unpublished report written to support undergraduate and postgraduate students, Baker and Edwards (2012) highlighted the students’ constant need for advice on the *number* of interviews required, but question whether it is appropriate epistemologically to define set sample sizes. The authors did expand on this indicating that sampling may be driven by elements such as theoretical perspective, subject discipline, time and resources, and other practicalities such as funding and ethical committee requirements. Several articles have discussed saturation with a critical lens (Hennink & and Kaiser, 2022; Leese et al., 2021; Sebele, 2020) but Townsend (2013) and Majid et al. (2018) argued that there is little guidelines or explicit advice available for researchers to use in identifying when saturation occurs. Similarly, (Aldiabat and le Navenec (2018) recognised that the most pressing issue for novice researchers relates to them demonstrating the achievement of saturation, which impacts on the trustworthiness of their findings. Also, Fusch and Lawrence (2015) confirmed



that the quality of a study is affected by the degree of saturation which seeks to improve validity and rigour (Sebele, 2020), but Saunders et al. (2017) posited that it is a concept that is used inconsistently amongst qualitative research. Therefore, the definition of saturation does not seem to be the issue, but a common agreement exists among scholars that researchers need to explicate the processes that took place to reach saturation.

In my study, I sought to demonstrate rigour by arguing that it is the very nature of engaging in the systematic processes of building a grounded theory shows a degree of rigour and validity i.e., coding, theoretical sampling, theoretical saturation, memoing and constant comparative analysis, and ensured I explained these steps and how they were used in my thesis (vander Linden, 2022). Nevertheless, Mwitwa (2022) conducted a recent systematic review has discovered five key factors that drive decisions surrounding saturation i.e., pre-determined codes and themes, sample size, relevancy of research participants, number of research methods and the length of interviews, which should be considered by researchers when designing their study. Moreover, what is recognisable is that reaching saturation in a qualitative study is variable, where Guest et al., Bunce, and Johnson (2006) indicated that a sample of 6-12 participants would be suffice for qualitative research, however (Hennink et al., Kaiser, and Marconi (2016, p.1) suggested that saturation could be achieved between 16-24 interviews when researchers “understand it all” (p. 1). Moreover, a more current review of the literature carried out by Hennink and Kaiser (2022) found that it took authors between 9 and 17 interviews to indicate saturation. These findings can help researchers when being asked to justify their sample sizes, but one can never be completely sure, as different interviews may shed differing levels of data richness into a phenomenon of interest, which may or may not be indicative of the sampling decisions made in research proposals. More importantly, Charmaz (2006, p.114) made the important point that small scale studies that declare saturation early in the study should examine their “thoroughness . . . and rigor of their analyses” (p. 114) especially if they make claims about such things as human nature or declare theory contrary to extant literature.

There is an important but subtle difference in the terminology of saturation in CGT compared to its use in general qualitative research as the researcher strives for what is known as theoretical saturation (See Morse, 2004) when “no new incidents/properties of a specific category have been discovered” (Glaser, 1969, p. 223). More recently, scholars have extended the meaning of theoretical saturation to indicate a point where theoretical sampling has deepened the generated concepts and are sufficient to support the generated theory (Moura et al., 2021). This understanding allowed me the opportunity to focus on *filling gaps* in my emerging theory and have an awareness of when to cease collecting further data. Having thought about saturation in finer detail, I could also relate to the idea of theoretical *sufficiency* that has gained traction in the wider literature giving preference to combining the rigour of the researcher’s analysis and the richness of the data rather than claiming saturation objectively (LaDonna et al., Artino, and Balmer 2021).

Our study focused on the depth of data available to us as opposed to a very large sample size. This was favourable as it was difficult to collect a significant amount of data through interviews, which may have been heavily affected by the sensitive nature of the substantive area. In truth, I was uncertain about discovering a clear point of saturation in

my study but understood that there needed to be sufficient evidence for ceasing sampling. This is where the totality of CGT principles proved to be invaluable as we demonstrated that adhering to a rigorous set of methodological processes facilitated the construction of a theory that was rooted in military personnels' accounts and conceptualised on a behavioural level. Moreover, by following the steps inherent in CGT, we reached a point towards the end of the research project where we stopped data collection as there were no new incoming insights that were relevant to the core category or emerging theory (Chen and & Boore, 2009).

However, most importantly, theoretical saturation is in itself purely *theoretical*, so we agreed that a grounded theory is always *modifiable*, meaning that new incoming data after the study has been completed does have the potential to add new theoretical insights to the developing theoretical framework (Holton and & Walsh, 2017). Therefore, further grounded theory work with veterans could result in the formation of different theories that describe many different main concerns and their resolutions.

### **Turning our attention to theoretical coding**

Once major categories/concepts are formulated, it is time for a researcher to turn their attention toward theoretical coding, however, despite this process being highly valuable to a CGT study, applying a theoretical code(s) is not mandatory as there are a plethora of effective studies that do not have them (Chametzky, 2016). Nevertheless, those that do have theoretical codes often result in the discovery of a basic social process (BSP), which in CGT terms can be defined as "fundamental patterns in the organization of social behavior as it occurs over time" (Glaser, 1978, p. 106). Examples of CGT studies that focus on a BSP are: "Finessing Incivility" surrounding the professional socialisation of student nurses (Thomas et al., Jinks, and Jack 2015); "Positioning," which focused on nurse researchers employed in clinical practice research positions (Berthelsen, 2020) and "Economising Learning," that explained how registered nurses balanced limited resources to maintain their competency (Rees et al., Farley, and Moloney 2021). However, an important point to remember is that Glaser (2005, p.2) further added that not all CGT's have the theoretical code of a 'process' but those that do have "two or more clear emergent stages" (p. 2). It is important to remember that the application of a theoretical code allows the researcher to integrate the substantive theory and ultimately defines the link between the main concern of the participants, the core category (how the main concern is being resolved or processed) and other major categories/concepts (Hernandez, 2009). Glaser (1992) has suggested 18 different coding families that include: the six Cs (e.g., causes, contexts, and consequences), the degree family (e.g., extent, level, or intensity) and strategy family (e.g., tactics, techniques, and mechanisms). Theoretical codes from the process family are usually immediately recognisable to nursing researchers when participants speak about changing over time or experiencing phases or transitions (Hernandez, 2009; Qureshi and & Ünlü, 2020)). I have found through talking to many classic grounded theorists that deciding upon the theoretical code that best fits and organises the developing theory can be problematic and is perhaps the hardest part of CGT as the researcher needs to avoid *forcing* a theoretical code on to the data. My research finished with the theoretical code of a process that involved three interlinked stages consisting of dealing with uncertainty, acceptance and finding meaning, that explained military personnels' behaviours and how they faced their

losses (core category). Each stage focused on explaining connections between the emerging categories and their properties (Shannak and Aldmour, 2009). For example, the dealing with uncertainty category included properties such as fearing the worst, being altruistic, questioning relationships, disconnecting from comrades, making social comparisons, competing and humour. As one can visualise, I benefitted greatly by naming properties using gerunds as they represented implicit and explicit action (Russell, 2014) as well as movement over time.

### Conclusion

This article demonstrates some of our reflections on using CGT methodology to build a substantive theory of combat-related limb-loss by adhering to the steps discussed in Glaser's books and by reading articles published in the *Grounded Theory Review* journal. Therefore, we support Simmons (2022) who made the important point that a researcher who prepares themselves in advance by reading the literature pertaining to CGT will likely have a less problematic journey using the method. However, we intend to make an important recommendation to fellow researchers to only immerse themselves in the literature relating to the stage that they are at in their research journey e.g., exploring philosophical standpoints to discuss your positionality or navigating the advice relating to using CGT to develop your research proposal, as this will help avoid becoming overwhelmed by what is required in doing CGT methodology.

### References

- Aldiabat, K. M., & le Navenec, C.-L. (2018). Data saturation: The mysterious step in grounded theory methodology. *The Qualitative Report*, 23(1), 245–261.
- Andrews, L., Higgins, A., Waring Andrews, M., & Lalor, J. G. (2012). Classic grounded theory to analyse secondary data: Reality and reflections. *Grounded Theory Review*, 11(1), 12–26.
- Artinian, B. (2009). An overview of Glaserian grounded theory. In B. Artinian, T. Giske, & P. Cone (Eds.), *Glaserian grounded theory in nursing research: Trusting emergence*. Springer.
- Ash, D. P. (2022). The importance of epistemology when defending a doctoral thesis: The research philosophical nature of classic grounded theory. *Grounded Theory Review*, 21(1), 85–91.
- Baker, S. E., & Edwards, R. (2012, January 11). *How many qualitative interviews is enough*. National Centre for Research Methods. [https://eprints.ncrm.ac.uk/id/eprint/2273/4/how\\_many\\_interviews.pdf](https://eprints.ncrm.ac.uk/id/eprint/2273/4/how_many_interviews.pdf)
- Berthelsen, C. (2020). A classic grounded theory on nurse researchers employed in clinical practice research positions. *Grounded Theory Review*, 19(1), 65–80.
- Breckenridge, J. P., Jones, D., Elliott, I., & Nicol, M. (2012). Choosing a methodological path: Reflections on the constructivist turn. *Grounded Theory Review*, 11(1), 64–71.

- Bryant, A. (2021). Continual Permutations of Misunderstanding: The Curious Incidents of the Grounded Theory Method. *Qualitative Inquiry*, 27(3–4), 397–411.  
<https://doi.org/10.1177/1077800420920663>
- Bryant, A., & Charmaz, C. (2007). *The SAGE handbook of grounded theory*. Sage Publications.
- Chalmers, C. (2018). *A classic grounded theory study exploring the perceptions of stress for people who have experienced a transient ischaemic attack* [Doctoral Dissertation]. University of Stirling.
- Chametzky, B. (2013). Generalizability and offsetting the affective filter. *Grounded Theory Review*, 2.  
[https://groundedtheoryreview.com/wp-content/uploads/2014/03/1202\\_01.pdf](https://groundedtheoryreview.com/wp-content/uploads/2014/03/1202_01.pdf)
- Chametzky, B. (2016). Coding in classic grounded theory: I've done an interview, now what? *Sociology Mind*, 6, 163–172.
- Charmaz, K. (2006). *Constructing grounded theory* (1st edition). Sage Publications.
- Charmaz, K. (2008). Grounded as an emergent method. In S. N. Hesse-Biber & P. Leavy (Eds.), *Handbook of Emergent Methods*. The Guildford Press.
- Charmaz, K. (2014). *Constructing grounded theory* (2nd edition). Sage Publications.
- Chen, H., & Boore, J. (2009). Using synthesised technique for grounded theory in nursing research. *Journal of Clinical Nursing*, 18, 2251–2260.
- Chun Tie, Y., Birks, M., & Francis, K. (2019). Grounded theory research: A design framework for novice researchers. *Sage Open Medicine*, 7, 1–8.
- Coffey, A. (2004). Autobiography. In M. S. Lewis-Beck, A. Bryman, & T. F. Liao (Eds.), *The SAGE encyclopedia of social science research methods*. Sage Publications.
- Corbin, J., & Strauss, A. (2014). *Basics of qualitative research* (4th edition). Sage Publications.
- Fusch, P. I., & Lawrence, L. R. (2015). Are we there yet? Data saturation in qualitative research. *Qualitative Report*, 20(9), 1408–1416.
- Gelling, L. (2011). What is the different between grounded theory and phenomenology. *Nursing Times*, 107(4), 25.
- Glaser, B. (1978). *Theoretical Sensitivity: Advances in the methodology of grounded theory*. Sociology Press.
- Glaser, B. (1992). *Emergence vs forcing: Basis of grounded theory analysis*. Sociology Press.
- Glaser, B. G. (1998). *Doing Grounded Theory – Issues and Discussions*. Sociology Press.
- Glaser, B. G. (1999). Keynote address from the fourth annual qualitative health research conference: The future of grounded theory. *Qualitative Health Research*, 9(6), 836–845.
- Glaser B. (2002). Conceptualization: On theory and theorizing using grounded theory. *International Journal of Qualitative Methods*, 1(2), 23–38.
- Glaser, B. G. (2005). *The grounded theory perspective III: Theoretical coding*. Sociology Press.

- Glaser, B. G. (2007). All is Data. *Grounded Theory Review*, 6(2), 1–22.
- Glaser, B. G. (2008). *Doing quantitative grounded theory*. Sociology Press.
- Glaser, B. G. (2009). *Jargonizing: Using the grounded theory vocabulary*. Sociology Press.
- Glaser, B. G. (2011). *Getting out of the data – grounded theory conceptualization*. Sociology Press.
- Glaser, B. G. (2012). *Basics of grounded theory analysis: Emergence versus forcing*. Sociology Press.
- Glaser, B.G. (2014). Choosing grounded theory. *Grounded Theory Review*, 13(2), 3–19.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory – Strategies for qualitative research*. Routledge.
- Goulding, C. (2017). Navigating the complexities of grounded theory research in advertising. *Journal of Advertising*, 46(1), 61–70. <https://doi.org/10.1080/00913367.2017.1281775>
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough?: An experiment with data saturation and variability. *SAGE Field Methods*, 18(1), 59–82.
- Hammersley, M. (1992). *What's wrong with ethnography?* Routledge.
- Hennink, M., & Kaiser, B. N. (2022). Sample sizes for saturation in qualitative research: a systematic review of empirical tests. *Social Science and Medicine*, 292(6), 1-10.
- Hennink, M. M., Kaiser, B., & Marconi, V. (2016). Code saturation versus meaning saturation: How many interviews are enough? *Qualitative Health Research*, 27(4), 1–8.
- Hernandez, C. A. (2009). Theoretical coding in grounded theory methodology. *Grounded Theory Review*, 8(3), 51–59.
- Hernandez, C. A., & Andrews, T. (2012). Commentary on "constructing new theory for identifying students with emotional disturbance. *Grounded Theory Review*, 1(11), 59–63.
- Hoare, K. J., Mills, J., & Francis, F. (2012). Dancing with data: An example of acquiring theoretical sensitivity in a grounded theory study. *International Journal of Nursing Practice*, 18(3), 240–245.
- Holton, J. A., & Walsh, I. (2017). *Classic grounded theory: Applications with qualitative and quantitative data*. Sage Publications.
- Howard-Payne, L. (2016). Glaser or Strauss? Considerations for selecting a grounded theory study. *South African Journal of Psychology*, 46(1), 50–62.
- Jeppsen, J. M. C., Wood, D. S., & Holyoak, K. B. (2019). Veteran resilience following combat-related amputation. *Journal of Military, Veteran and Family Health*, 5(2), 60–66. <https://doi.org/10.3138/jmvfh.2018-0053>
- Keeling, M., Williamson, H., Williams, V. S., Kiff, J., Evans, S., Murphy, D., & Harcourt, D. (2023). Body image and psychosocial well-being among UK military personnel and veterans who sustained appearance-altering conflict injuries. *Military Psychology*, 35(1), 12–26. <https://doi.org/10.1080/08995605.2022.2058302>

- Kenny, M., & Fourie, R. (2014). Tracing the history of grounded theory methodology from formation to fragmentation. *Qualitative Report, 19*(52), 1–9.
- Konecki, K. T. (2018). Classic grounded theory - The latest version. *Symbolic Interaction, 41*(4), 547–564.
- LaDonna, K. A., Artino, A. R., & Balmer, D. F. (2021). Beyond the guise of saturation: Rigor and qualitative interview data. *Journal of Graduate Medical Education, 13*(5), 607–611.
- Leese, J., Li, L., Nimmon, L., & Townsend, A. (2021). Moving beyond “until saturation was reached”: Critically examining how saturation is used and reported in qualitative research. *Arthritis Care and Research, 73*(9), 1225–1227.
- Lehane, O. (2019). *A journey through classic grounded theory: Exploring the work of grassroots violence prevention practitioners*. SAGE Publications Ltd. <https://doi.org/10.4135/9781526477224>
- Levers, M. J. D. (2013). Philosophical paradigms, grounded theory, and perspectives on emergence. *Sage Open, 3*(3), 1–6.
- Li, Y., Turale, S., Stone, T., & Petrini, M. (2015). A grounded theory study of ‘turning into a strong nurse’: Earthquake experiences and perspectives on disaster nursing education. *Nurse Education Today, 35*, e43–e49.
- Low, J. (2016). A pragmatic definition of the concept of theoretical saturation. *Sociological Focus, 52*(2), 131–139.
- Lowe, A., & Tossey, T. (2017). A set of principles for doing and evaluating classic grounded theory research in information systems. In T. Tossey (Ed.), *Information Technology Integration for Socio-Economic Development*. Information Science Reference.
- Majid, M. A. A., Othman, M., Mohamad, S., & Lim, S. A. H. (2018). Achieving data saturation: Evidence from a qualitative study of job satisfaction. *Social and Management Research Journal, 15*(2), 66–77.
- Mathias, B. D., & Smith, A. D. (2015). Autobiographies in organizational research: Using leaders’ life stories in a triangulated research design. *Organizational Research Methods, 19*(2), 204–230.
- McCall, C., & Edwards, C. (2021). New perspectives for implementing grounded theory. *Studies in Engineering Education, 1*(2), 93–107.
- McCallin. (2011). Moderated guiding: A grounded theory of nursing practice in end-of-life care. *Journal of Clinical Nursing, 20*(15–16), 2325–2333.
- Mohajan, D., & Mohajan, H. K. (2022). Memo writing procedures in grounded theory research methodology. *Studies in Social Science & Humanities, 1*(4), 10–18. <https://doi.org/10.56397/sssh.2022.11.02>
- Morse, J. M. (2004). Theoretical saturation. In M. S. Lewis-Beck, A. Bryman, & T. F. Liao (Eds.), *The Sage encyclopedia of social science research methods*. Sage Publications.
- Morse, J. M., & Niehaus, L. (2009). *Mixed method design: Principles and procedures*. Left Coast Press.

- Morse, W. C., Wayde, C., Lowery, D. R., & Steury, T. (2014). Exploring saturation of themes and spatial locations in qualitative public participation geographic information systems research. *Society & Natural Resources*, 27(5), 557–571.
- Moura, C. O., Silva, I. R., Santos, K. A., Crespo, M. C. A., & Silva, M. M. (2021). Methodological path to reach the degree of saturation in qualitative research: grounded theory. *Revisita Brasileira de Enfermagem*, 75(2), e20201379.
- Mwitwa, K. (2022). Factors affecting data saturation in qualitative studies. *International Journal of Research in Business and Social Science*, 11(4), 414420.
- Nathaniel, A. (2019). How classic grounded theorists teach the method. *Grounded Theory Review*, 18(1), 13–25.
- Nathaniel, A. K. (2011). An integrated philosophical framework that fits grounded theory. In V. B. Martin & A. Gynnild (Eds.), *Grounded Theory - The philosophy, method, and work of Barney Glaser*. BrownWalker Press.
- Olson, M. (2006). *Driven succeeding - the serpentine path of adult learning: A grounded action study in adult education* [Doctoral Dissertation]. Fielding Graduate University.
- O'Reilly, M., & Parker, N. (2013). Unsatisfactory saturation: A critical exploration of the notion of saturated sample sizes in qualitative research. *Qualitative Research*, 13(2), 190–197.
- Qureshi, H. A., & Ünlü, Z. (2020). Beyond the paradigm conflicts: A four-step coding instrument for grounded theory. *International Journal of Qualitative Methods*, 19. <https://doi.org/10.1177/1609406920928188>
- Ralph, N., Birks, M., & Chapman, Y. (2014). Contextual positioning: Using documents as extant data in grounded theory research. *SAGE Open*, July-September 1–7.
- Redman-MacLaren, M., & Mills, J. (2015). Transformational grounded theory, voice and action. *International Journal of Qualitative Research*, 14(3), 1–12.
- Rees, S., Farley, H., & Moloney, C. (2021). How registered nurses balance limited resources in order to maintain competence: a grounded theory study. *BMC Nursing*, 20(176).
- Russell, A. (2014). A comment on gerunds: Realizing the researcher's process. *Grounded Theory Review*, 13(2), 43–46.
- Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., & Jinks, C. (2017). Saturation in qualitative research: exploring its conceptualization and operationalization. *Quality and Quantity*, 52(4), 1893–1907.
- Sebele, M. F. Y. (2020). Saturation controversy in qualitative research: complexities and underlying assumptions. A literature Review. *Cogent Social Sciences*, 6(1838706). <https://doi.org/10.1080/23311886.2020.1838706>
- Shannak, R., & Aldhmour, F. (2009). Grounded theory as a methodology for theory generation in information systems research. *European Journal of Economics, Finance and Administrative Sciences*, 15, 32–50.

- Simmons, O. E. (2006). Some professional and personal notes on research methods, systems theory, and grounded action. *The Journal of New Paradigm Research*, 62(7), 481490.
- Simmons, O. E. (2022). *Experiencing grounded theory – A comprehensive guide to learning, doing, mentoring, teaching and applying grounded theory*. BrownWalker Press.
- Singh, S., & Estefan, A. (2018). Selecting a grounded theory approach for nursing research. *Qualitative Nursing Research*, 5, 1–9.
- Strauss, A. L., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Sage Publications.
- Strauss, A. L., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd edition). Sage Publications.
- Thomas, J., Jinks, A. M., & Jack, B. A. (2015). Finessing incivility: The professional socialisation of student nurses' first clinical placement, a grounded theory. *Nurse Education Today*, 35(12), e4–e9.
- Timonen, V., Foley, G., & Conlon, C. (2018). Challenges when using grounded theory: A pragmatic introduction to doing GT research. *International Journal of Qualitative Methods*, 17(1). <https://doi.org/10.1177/1609406918758086>
- Tossy, T., Brown, I. T. J., & Lowe, A. (2017). Doing classic grounded theory research in information systems. In T. Tossy (Ed.), *Doing Classic Grounded Theory Research in Information Systems: Trust in Emergence*. Information Science Reference.
- Townsend, K. (2013). Saturation and run off: how many interviews are required in qualitative research? *Human Resource Management*.
- Urquhart, C. (2013). *Grounded theory for qualitative research – A practical guide*. Sage Publications.
- vander Linden, K. L. (2022). Criteria for assessing a classic grounded theory study: A brief methodological review with minimum reporting recommendations. *Grounded Theory Review*, 20(2), 107–115.
- Weed, M. (2016). Capturing the essence of grounded theory: the importance of understanding commonalities and variants. *Qualitative Research in Sport, Exercise and Health*, 9(1), 149–156.
- Weerawardena, J., & Sullivan Mort, G. (2006). Investigating social entrepreneurship: A multidimensional model. *Journal of World Business*, 41(1), 21–35.
- Yang, L., Lidong, Q. I., & Zhang, B. (2022). Concepts and evaluation of saturation in qualitative research. *Advances in Psychological Science*, 30(3), 511–521.
- Yarwood-Ross, L. (2019). *Facing losses in combat-related limb-loss: A classic grounded Theory study* [Doctoral Dissertation]. Manchester Metropolitan University.
- Yarwood-Ross, L., & Jack, K. (2015). Using extant literature in a grounded theory study: A personal account. *Nurse Researcher*, 22(4), 18–24.

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