Patient-Oriented Research and Grounded Theory: A Case Study of How an Old Method Can Inform Cutting-Edge Research

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Abstract
Creating evidence that is both scientifically rigorous and patient oriented in addressing patients’ needs is essential to informing health-care professionals’ practice and meeting patient needs. Patient-oriented research (POR) aims to address this 2-fold mandate by engaging and incorporating patients’ voices throughout the research process through a variety of techniques. Currently, there is little methodological rigor or guidance to help qualitative patient-oriented researchers design, collect, and analyze patient data. Classical grounded theory (GT) is arguably one of the most rigorous qualitative research methods, focusing on the development of theory from data grounded in participants’ voices. As such, classical GT is an ideal methodological approach for conducting POR due to its rigor, patient-oriented focus, and generation of an empirical model focused on the topic of interest. The purpose of this article is to describe the convergence and divergence between classical GT and POR, based on the current literature and pragmatically through an ongoing classical GT study focused on combat veterans’ perspective on Operational Stress Injuries (OSIs). By describing the methodological principles and their implementation in a POR study, we provide readers with both substantive and practical knowledge to utilize classical GT in POR studies, particularly within study populations that may be averse to or experience challenges in participating in research. Classical GT therefore provides patient-oriented researchers with a pragmatic methodological framework for engaging patients and generating rigorous evidence.

Keywords
grounded theory, patient-oriented research, qualitative research, methodology, veterans

Introduction
The purpose of this article is to describe a qualitative approach that effectively integrated a patient-oriented research (POR) framework and the classical grounded theory method (henceforth referred to as classical GT). This approach upholds the principles and ethos of a POR study while maintaining qualitative research rigor and fidelity to the central tenants of the classical GT method. The application of classical GT to POR is also timely and needed because of the growing necessity of creating health information that is implementable to patient populations that is rigorous and relevant. Historically, descriptions of qualitative methodology in POR studies have been highly theoretical, with limited methodological accounts of how researchers were able to incorporate a POR framework and principles into their research, while also maintaining fidelity to their research method. In this article, we describe the utility of the classical GT method within a POR framework by drawing on an ongoing POR GT study on combat veterans’ perspectives on their Operational Stress Injuries (OSIs) (Nash, Silva, & Litz, 2009).

To describe how we integrated POR and classical GT principles into our study, we begin with a review of the foundational principles of POR and classical GT, before discussing points of convergence and divergence between these two approaches. We then discuss in detail the way that our study design and activities were implemented to meet the objectives for both POR and classical GT, which can be adopted by readers into their own POR studies. To achieve these objectives, we...
engaged combat veterans with OSIs (psychological and social challenges associated with military employment) as equal partners and knowledge experts throughout the research process beginning with the development of the research design, recruitment, data collection, and analysis. Qualitative research can play an important role in POR; however, it has not been widely discussed in the POR literature. Currently, there is a lack of guidelines and standards for conducting POR with qualitative methods and what differentiates traditional qualitative research from POR qualitative research. We seek to address this gap and provide a rationale for how our chosen method—classical GT—is compatible with POR and how it can enhance patient-oriented knowledge and outcomes.

**POR as an Approach to Knowledge Development**

The creation of knowledge that is both rigorous and effective in addressing patients’ needs and preferences is essential to transforming the health-care system to be more person-centered and sustainable (Hartzband & Groopman, 2009; Institute of Medicine, 2001; Laine & Davidoff, 1996; Truog, 2012). While patient-centered knowledge is widely reputed as guiding health-care decisions at a policy and practice level, recent critical reviews of the literature have demonstrated that patients frequently do not experience their health care as being patient-oriented at the “bedside” (Fraenkel & Fried, 2010; Krahn & Naglie, 2008; Marshall & Bibby, 2011; Porter, 2009; Sherbourne, Sturm, & Wells, 1999; World Health Organization, 2007). To develop evidence capable of addressing both patients’ needs and preferences, a new approach to developing empirical knowledge is required. POR aims to address this gap by focusing on research priorities from the perspectives of patients and conducting research that engages patients throughout this process (Canadian Institute of Health Research, 2011; Fleurence et al., 2013; Patient-Centered Outcomes Research Institute, 2018). Proponents of POR argue that patients and caregivers have a unique wealth of knowledge gained through living with a health condition or illness, knowledge that is frequently underutilized or ignored, both clinically and in research (Canadian Institute of Health Research, 2011). To ensure a study is patient-oriented, three fundamental principles must be integrated: (1) patients are seen as experts, (2) all research is solely directed by patients’ needs, and (3) patients are equal collaborators within the research study team (Canadian Institute of Health Research, 2017). Within a POR framework, patients are considered “experts” because they can offer concrete knowledge regarding what is most problematic with medical or psychological conditions, what treatment options are preferred, and finally, what is needed to improve quality of lives for patients and caregivers. Practically, this belief requires the researcher to ask patients what is most important to research and why. In this way, it is not necessarily the topic but rather the means by which the researcher came to the topic, which makes it POR. The ethos of this idea has been summarized within POR literature as “nothing about me without me” (Sadlera, Fulford, & Hoffe, 2009, p. 607).

Building on the notion “nothing about me without me,” the third required component of POR is patient engagement. Patient engagement has been defined as the “involvement of patients engaged with researchers in activities of governance, priority setting, conduct of research, knowledge translation, and evaluation” (Alberta SPOR Support Unit, 2018, p. 3). Additionally, patient engagement is considered a precursor to high-quality patient-centered care as it can provide a “triple aim” impact on: (1) a patient’s experience of care, (2) patient outcomes at the individual and population level, and (3) per capita health-care costs (Manafo, Petermann, Mason-Lai, & Vandall-Walker, 2018). There are six levels of patient engagement associated with POR, which are lead/inform, participate, consult, involve, collaborate, and lead/support (Manafo, Petermann, Vandall-Walker, & Mason-Lai, 2018) (Figure 1).

POR can be conducted across all six levels of patient engagement, but it is important to note that not all forms of engagement are considered equal. There is a growing push from governmental bodies and patient advocacy groups for POR researchers to move beyond the first level of “lead/inform” and at minimum have patients be “consulted” throughout the research process (Alberta SPOR Support Unit, 2018; Canadian Institute of Health Research, 2017). For many researchers, including qualitative investigators, this represents a radical countercultural approach to research where patients are not merely subjects but are equal partners in research (Mead & Bower, 2000; Snyder & Engström, 2016). As a result, patients not only provide guidance on research priorities but are engaged throughout the research process, including but not limited to, conducting data collection and analysis (Canadian Institute of Health Research, 2017).

With the requirement to have patients engaged throughout the research process, researchers must consciously contemplate how patients will be effectively integrated within their research teams. Specifically, researchers must address how this integration may impact the research design, recruitment, data collection, and analysis associated with the chosen research method. Within classical GT, patient engagement represents both a source of strength and of tension. As classical GT requires researchers to begin with no preconceptions and maintain a stance of openness throughout the research process, this potentially can allow for rich patient engagement as this methodology facilitates giving a voice to study participants, while also maintaining an explicit and sequential approach to conducting research. However, to date, very little literature is available regarding how to conduct classical GT data collection or analysis as a team. Nonetheless, regardless of the method, the deeper the level of engagement, the greater the influence the patient has in decision-making and leading research activities—from planning to dissemination (Alberta SPOR Support Unit, 2018).

This shift demands that researchers, clinicians, and health-care administrators view patients as active and respected partners in the research process and the most important...
stakeholders (Garces et al., 2012). POR proponents have identified that regardless of the challenges associated with the highest level of patient engagement, engagement is essential to POR, as patients often challenge assumptions held by researchers regarding what is relevant research to them. For example, the focus within medicine on randomized controlled trials (RCTs) for pharmacological interventions to treat a specific medical condition has progressed largely unchallenged, despite patients repeatedly desiring to have nonpharmacological interventions as first-line treatment options (Canadian Institute of Health Research, 2011; Luce et al., 2009; Tunis, Stryer, & Clancy, 2003). In contrast, POR proponents have argued that effectual health-care knowledge needs to address current health-care realities for the growing percentage of patients who have comorbid conditions and for whom issues of quality of life for both themselves and their families are paramount (Basch, 2013; Fleurence et al., 2013; Godlee, 2012; Hartzband & Groopman, 2009; Keirns & Goold, 2009; Salcido, 2015).

To develop POR, methodological standards research has been established. These methodological standards, however, have focused on the development of comparison effective research (CER) and pragmatic clinical trials (PCTs). Regarding CER, the focus is on comparing the effectiveness of current treatment for diseases (Fiore & Lavori, 2016), while PCTs are focused on developing new knowledge through RCTs that are designed to encompass current patients’ realities including having comorbid conditions, being on multiple medications, and coming from diverse ethnic backgrounds (Ford & Norrie, 2016; Zuidgeest et al., 2017). Central to the creation of these methodological standards has been the careful consideration of how POR principles can be fully integrated, without changing or diminishing the rigor of the research methods. For example, within PCTs, POR principles are upheld by recruiting from a population requiring the intervention and determining outcomes that are meaningful in real-world clinical practice (Ford & Norrie, 2016). Equally, however, PCTs must also ensure conformity to methodological standards to support making design choices that are consistent with the intended purpose of the trial (Zuidgeest et al., 2017).

While the creation of these methods has allowed POR to be integrated in the quantitative method paradigm, there are no methodological standards for the integration of POR into qualitative research. This is surprising given POR proponents’ contention for the value that qualitative research can add to POR. Qualitative research has conventionally been considered patient centered, but it is important to clarify that standard forms of qualitative research are not necessarily synonymous with POR. Rather, as illustrated POR requires researchers to follow specific principles and a set framework.

The Patient-Centred Outcomes Research Institute (2018) “POR Methodologies Standard” have identified five standards as crosscutting all methods (quantitative and qualitative) with a remaining eight focused exclusively on different quantitative research methods. Thus, while all POR research must have: (1)
patients identifying gaps and helping to formulate research questions, (2) patient centeredness, (3) data integrity and rigorous analyses, (4) strategies for preventing and handling missing data, and (5) heterogeneity of treatment effects (Patient-Centered Outcomes Research Institute, 2018), these five categories provide minimal guidance on how this should be done within a qualitative study.

**Classical GT**

Classical GT is the most systematic, rigorous, and well-used qualitative research method in health care (Munhall, 2012). This approach is an inductive research methodology that discovers theories capable of parsimoniously explaining problematic behaviors found in a particular population (Glaser & Strauss, 1967). As such, classical GT is highly attractive to health-care researchers and arguably the quintessential method of qualitative POR because of its ability to understand and elucidate what is most pressing and problematic to patients. Simply, a theory grounded in and generated from patients is much more likely to be successful in bringing about the desired change, with a minimum of unintended consequences, than one which is not (Simmons, 2011).

Moreover, classical GT is also considered one of the most empirical qualitative research methods (including in comparison to other GT methods), as the discovered data are not required to be interpreted, constructed, or narrated through any specific theoretical paradigm (Holton & Wash, 2017). Such an argument is also supported by Glaser (1992, 1998, 2003) who has repeatedly maintained that classical GT is neither a qualitative nor quantitative method, rather it is a unique, general, inductive, conceptual, and ecologically valid theory generating method. Simmons (2011) described classical GT as a “middle territory” method because of its adoption of both quantitative and qualitative tenants, which ensures the explanatory theory is both objectively grounded in data, while also providing a subjective foothold for effective action and change.

Since its inception by Glaser and Strauss in 1967, GT has evolved into three streams—Classical, Straussian, and Constructivist—each with different features and processes (Glaser, 1998). With the recent resurgence and uptake of classical GT in health-care research, Glaser and Holton (2004) stressed that it is imperative that researchers using classical GT understand and strictly adhere to the methodology and not conflate it with other qualitative methods. To help highlight the unique methodological tenants of classical GT, Holton and Walsh (2017) argued it is: (1) a complete and systematic research method, (2) not attached to any philosophical perspective including the quantitative–qualitative dialectic, (3) able to present an integrated theoretical explanation of a latent pattern of social behavior, (4) primarily focused on discovering new theories, and (5) the data do not require interpretation or co-creation by the researchers (Glaser, 1978, 1998, 2003; Glaser & Strauss, 1967). In short, classical GT is based on rigorous and systematic principles of data collection and analysis, not a priori epistemological assumptions or theoretical concepts.

Glaser (1978) stated that importance of data collection in classical GT should not be placed on the type of data but rather on how relevant the data are to the research project. Glaser and Strauss (1967) indicated that data could be collected from a variety of sources including primary sources (i.e., participants or populations of interest) and/or secondary sources (i.e., institutional documents, surveys, books, articles) provided it helped the researcher understand the phenomenon in question. The focus in classical GT is not on an individual datum, or even the direct comparison of data, instead the focus is on theoretically comparing data to begin establishing properties or categories that can later be systematically organized into a sociological theory (Glaser & Strauss, 1967). It is essential that the properties and categories are rooted in the data and not a forced “fit” by the researcher Glaser (1978). According to Glaser (1998), fit or validity means that the GT researcher must ensure that each category represents the data it purports to denote. If the data collected are relevant, then emergent concepts will relate to the true issues of the participants. Allowing for emergence (the process of the data coming into view or becoming exposed) is essential in classical GT because it helps to ensure researchers have indeed “discovered” the correct data.

To ensure “discovery” of the data, data analysis in classical GT utilizes the constant comparative method, two levels of coding (substantive and theoretical), and writing memos (Glaser, 1978, 1998; Glaser & Strauss, 1967). The constant comparative method consists of concurrent data collection, comparison, and analysis whereby data analysis informs future data collection in an ongoing iterative manner to fully understand the topic of interest (Glaser & Strauss, 1967). The purpose of using the constant comparative method is to ensure that the collected data are directing the researcher toward the essential elements of the problematic issue as understood by the participants themselves. This iterative process ensures that the researcher is “following the data”—versus fitting the data into the researchers’ preconceived theory or bias. As a result, the researcher iteratively builds upon the knowledge already collected until they reach data saturation—the point when no new information is being discovered. By employing this targeted approach to data collection throughout the study, Glaser and Strauss (1967) noted that the researcher can distill large amounts of study data into data that are focused, empirical, and pertinent to the emerging theory.

As researchers commence the coding process, Glaser and Strauss recommend initially using in-vivo codes (participants’ words) at the substantive level. Glaser (1978) argued that by using participants’ own words, researchers avoid imparting their own biases, a priori ideas, concepts, or theoretical language onto the data. During the substantive coding process, the researcher also memos, which capture theoretical ideas and allow the research to develop abstract ideas into a cohesive theory in an iterative manner (Glaser, 1978, 1998). Glaser suggested that this system allowed the researcher to ascertain which categories remain the most problematic and those that have been suitably addressed.
The second stage of data analysis begins when the researcher moves from substantive coding to theoretical coding. The purpose of theoretical coding is to begin connecting the individual categories and properties, as discovered in substantive coding, within a systematic framework (Glaser, 1978, 1998; Glaser & Strauss, 1967). Practically, theoretical coding was done primarily though Glaser’s (1978, 1998, 2005) recommendation to “sort memos” and not return to the original data as the launching point for writing up each category. The purpose of using the memos and not the original data was to try and avoid the temptation to write a description of the phenomena in study rather than discussing how the discovered concepts link together theoretically within a detailed, precise, and parsimonious theory.

Glaser (1978) argued that if researchers conscientiously complete each of the data collection and analysis stages, they are more likely to create an accurate classical GT study from the data—a study marked by significant rigor and credibility achieved by utilizing standardized principles that ensure that the theory is derived directly from the data—that is, the population of interest. Moreover, the resultant theory from such a study can articulate more than just facts related to the population and social interactions that were categorized by the population as being important or overlooked. In health care, the knowledge derived from classical GT studies could, therefore, be extremely beneficial as such knowledge can offer insights into the care preferences, priorities, and satisfaction of certain populations, while also illuminating why certain behaviors are problematic.

**Convergence and Divergence Between POR and GT**

Based on the above description, there is a potentially symbiotic relationship between classical GT research and POR. Further, given the strong congruence in their focus on patient centeredness, rigorous data analysis method, and robust data sources, classical GT is an excellent method to use when researchers wish to conduct a qualitative POR project that seeks to identify key theoretical processes behind behaviors and social interactions. However, while there is strong congruence between POR and classical GT, it is important to recognize that they are not identical, and points of methodological tension exist between them, which cannot be overlooked. These tensions revolve around patient engagement (specifically in the data analysis stage), Glaser’s requirement to have no a priori theoretical framework (including not mixing classical GT with other methods or approaches), and classical GT being an inductive method (Figure 2).

**Convergence**

The central contribution classical GT makes to POR is its ability to identify what the main concern or issue is within a specific population. Specifically, classical GT is a patient-centered research method that seeks to understand patient issues rigorously, and exclusively, from the patient’s perspective. While there is no consensus definition of patient-centeredness, the central tenants include: (1) considering patients’ needs, wants, perspectives; (2) adopting a biopsychosocial perspective; (3) empowering patients to actively participate in their care; and (4) enhancing power sharing and therapeutic relationship between patient and doctor (Epstein & Street, 2011; Ishikawa, Hashimoto, & Kiuchi, 2013; Mead & Bower, 2000). Likewise, Glaser and Strauss (1967) asserted that the starting point in classical GT is to understand the perspective and experience of study participants rather than the a-priori assumptions of the researcher or the literature. Classical GT, therefore, produces research that addresses the requirement that POR “identify and include outcomes the population of interest notices and cares about (e.g., survival, functioning, symptoms, health-related quality of life) and that inform an identified health decision” (Patient-Centered Outcomes Research Institute, 2018, p. 2). By trying to delimit preconceived questions or a-priori concepts or theory, the classical GT method helps to allow researchers to develop a theory based exclusively on what matters to participants.

Another point of synergy between classical GT and POR is the importance of rigor when conducting data analysis. As there are currently no methodological standards for qualitative POR, using an established method with rigorous data collection and analysis procedures may have significant value for researchers. However, to achieve the full benefits of using classical GT, a researcher must adhere to the methodological principles—data collection, analysis, and theory development—established by Glaser (Nathaniel, 2011). This then is both the strength and potential challenge when using a POR framework in a classical GT study as there is a need to be cautious about not changing the classical GT data analysis process to fit a POR approach. This argument has also been made by Glaser and Holton (2004) who insist there can be change or modification to classical GT’s research method. However, if researchers approach data collection and analysis with the intention to follow classical GT principles, then classical GT can produce a rigorous POR study that has direct patient applicability.

Classical GT and POR also share the mutual goal of requiring a robust and heterogeneous sample for data collection. In
**Divergence**

While there are strong points of congruence between POR and classical GT, it is important to recognize that there are points of divergence and tension with these two approaches to research. One area of tension is the difference regarding who conducts data collection and analysis in classical GT versus POR. Within the higher levels of patient engagement in POR, patients are increasingly involved in the data collection and analyze as full members of the research team. From a POR perspective, the purpose of having patients involved in data collection and analysis is for patients to be contributing as “equal” partners throughout the research project, so that knowledge, which can only be identified by patients who have lived experiences, is not missed. In contrast, Glaser (1978) strongly maintained that data collection and analysis must be conducted independently of study participants by the researcher to maintain what he calls “intellectual autonomy.” Simply, Glaser argued that the researcher should exercise caution in sharing information or consulting with anyone while conducting the data collection and analysis until the theory has emerged. Glaser’s focus on intellectual autonomy has a two-fold purpose. First, based on the method, classical GT data are discovered and not co-created. Practically, this means that data discovery is not decided by committee nor negotiation but rather from the researcher being immersed in the data until they begin to discover the underlying conceptual processes. Second, Glaser expressed concerns that without holding some intellectual autonomy, the researcher may be inappropriately influenced to create a theory that reflects preestablished ideas and assumptions including those held by study participants.

This need for researcher autonomy also creates a second area of tension between POR and classical GT. While POR researchers and Glaser would agree that researchers should begin the research from an a-priori position of “not knowing,” Glaser (1978, 1998, 2013) was insistent researchers must maintain this stance throughout the entire research process. Glaser’s assertion is therefore in direct contention with Patient-Centered Outcomes Research Institute (2018) recommendation there should be clear preestablished statements in place regarding the assumptions and theoretical frameworks that guide the data analysis. Glaser (2013) argued that preestablished theoretical frameworks, concepts, or theories might cause researchers to fall into the trap of analyzing their data using “pet” theories. As such, it is likely that Glaser would question whether classical GT analysis can be done as a group, especially with patients who do not have research and methodological training. Glaser (1978) highlighted that classical GT is a problematic method for novice researchers to master, as they often are unable to transition from substantive coding (using participant words) to theoretical coding (abstracting concepts from the raw data). Moreover, Glaser and Holton (2004) argued that a researcher ascribing to classical GT should not adopt or mix any other qualitative method processes, principles, or assumptions, as doing so may erode the scientific rigor of the classical GT method. As such, to integrate a POR approach/ethos to a classical GT study may be regarded by some as directly contradicting Glaser’s edict, as it is attempting to adopt or mix another research method process.

Finally, it is important to note that POR researchers and Glaser would disagree on the use and value of inductive logic. Glaser and Strauss (1967) chose to develop an inductive approach because they wanted to have a systematic way to build a theory from the “ground” up and their belief that deductive methods had become virtually synonymous with theory verification. In classical GT, inductive logic is essential because it is the means by which the researcher develops the categories that systematically describe the majority of the discovered behaviors (Glaser, 1978, 1998). While POR researchers would agree with Glaser and Strauss that research must be from the “ground up,” some researchers have argued that a POR perspective represents a shift away from inductive logic back toward a hypothetic-deductive logic model (Concato, 2013; Sacristán, 2013). POR researchers have argued that if the path from an individual patient toward the average patients requires data aggregation, the path back to the individual should follow the inverse process: disaggregation of data, the analysis of subgroups, and individuals (Horwitz, Singer, Makuch, & Viscoli, 1996; Mant, 1999; Rothwell, 1995; Sacristán, 2013). Moreover, POR researchers would also argue that this form of inductive logic has helped to create many of the problems currently faced with evidence-based medicine.
A Case Study

Having described the theoretical foundations of both POR and GT and discussed points of overlap and tension, a practical application of these methods is offered. Specific attention will be given how the lead author and team applied both POR and GT principles in her doctoral research on Canadian combat veterans with OSIs (Table 1).

Research Context and Aims

Military personnel who have been deployed to combat often experience OSIs, which are associated with mental health illness (Hoge, Auckterlonie, & Milliken, 2006; Lapierre, Schweger, & LaBauve, 2007), psychosocial difficulties (Sayer et al., 2010; Sayers, Farrow, Ross, & Osling, 2009), and spiritual and moral injuries (Currier, Holland, & Drescher, 2015; Litz et al., 2009). Despite using traditionally highly effective evidence-based therapies (pharmacological and cognitive-based psychotherapies) for treatment, less than half of veterans who need help for mental health concerns actively seek care (Burnam et al., 2008; Milliken, Auckterlonie, & Hoge, 2007), and among those who do, there is a high attrition rate (Hoge, 2011; Hoge et al., 2014; Johnson et al., 1999; Schnurr et al., 2003). The reasons for these poor outcomes are not well understood, but one of the least understood and under-researched aspects of OSIs is the perspectives of veterans themselves. From an evidence-based and person-centered perspective, the inclusion of veterans’ voices is essential as much remains unknown about why veterans continue to struggle despite significant financial increases to programs and support services. The authors conducted an integrated POR classical GT study to help fill this gap in the evidence.

Project Planning—Engaging Veterans as Equals

Project planning began by the lead author establishing relationships with key local veterans’ groups, organizations, and governmental institutions. These relationships were developed by reaching out to organizations requesting individual face-to-face meetings. When meeting with the members of governmental veterans’ organizations and private clinicians, the lead author expressed her genuine desire to incorporate their expertise and what aspects of veterans’ health and well-being they felt remained problematic and why. Discussions also focused on the relevance and applicability of this research to their organizations and what would be helpful for them to know.

Next, to engage veterans as equal partners, key relationships with veteran leaders were established. Initially, when meeting with local veterans’ leaders, these interactions focused on building trust and credibility. During these initial conversations, veteran leaders made it explicitly clear that veterans only trust “their own,” and therefore to get any participants, the lead author would need to be “vetted and vouched” for by veteran leaders. The lead author was also challenged to reflect on if she had the necessary skills and tenacity to work with this population and was warned interviewing would have to go “both ways”—that is she would likely be questioned and challenged by potential participants—especially given her status as a female civilian clinician–researcher.

Ethics approval was obtained from the university Conjoint Health Research Ethics Board (REB: 16-1539). Participants were provided informed consent through verbally discussing the research before interviews, signing a consent form, and being assured confidentiality through the removal of all personal information.

Developing a POR Design

Since the aim of this research was to elucidate what elements of service veterans deemed most injurious concerning their OSI, classical GT was selected because it does not require an a priori theory or research question. Moreover, as classical GT does not need the researcher to co-create or interpret the data, this allowed the data—the voices of the combat veterans—to speak for themselves. Veterans were consulted before beginning the research on all aspects of the research design including recruitment strategies, appropriate and veteran-centered interview guide questions, and the format for data collection.

Veterans agreed doing a qualitative study would be more helpful to them than a quantitative study, as many of the veterans expressed a desire to have their experiences heard outside the confines of standardized research studies that often rely on medical concepts and psychometric tools that participants may find contentious. During the initial meetings with veteran leaders, the semistructured interview questions were modified and expanded to ensure cultural sensitivity and veteran-friendly language. Taboo practices in military culture were also discussed such as not asking direct questions about participant combat experiences or details of military missions. One discussion focused on creating veteran-friendly data collection methods including having partners/friends attend the interviews, as some veteran leaders were concerned that one-on-one interview might be too intense for some participants. It was also decided that each veteran participant could choose the place of the interview, as some spoke of having troubles with sitting in a closed room, while for others, the issue of privacy was paramount and therefore having a closed contained room was essential. These veteran-focused changes not only ensured that the research was patient-oriented but also helped to delimit any potential harm to participants. In collaboration with veteran leaders, a safety plan was developed to help ensure the psychological and emotional safety of potential participants.

Veteran-Friendly Recruitment

Relationships established with both local community veteran organizations and key veteran leaders were used to assist in locating and contacting potential participants. For local organizations, this included displaying posters in their facilities, and the lead author attending several local veteran events where she
Table 1. Principles and Values of GT and POR and How Each Value Was Applied in This Research.

| Principle or Values                                      | GT or POR | Summary of How Values Were Upheld in the Study |
|---------------------------------------------------------|-----------|-------------------------------------------------|
| Patient centeredness                                   | POR       | • Key veteran leaders were engaged before the study began and were asked about their interest and desire to have this work done. |
|                                                         |           | • Veterans were consulted regarding study design, recruitment, and data collection methods. |
|                                                         |           | • Veterans were viewed as “experts” and that research team wanted to learn from them. |
| Developing trust and credibility in the population of interest | POR       | • The researcher conducted individual face-to-face meetings with key organizations, clinicians, and veteran leaders. |
|                                                         |           | • Came to the community in a position of not-knowing and humility. |
|                                                         |           | • Began volunteering with local veteran organizations to support specifically veterans’ mental health. |
| Finding out what was most important to patients         | POR, GT   | • The researcher began with no hypothesis or predeveloped theories regarding what was essential to veterans. |
|                                                         |           | • Semistructure veteran-friendly interview guide with broad, open-ended questions was co-constructed with veterans. |
|                                                         |           | • Targeted questions were only asked once key categories were derived from the data. |
| Becoming culturally component                           | POR       | • Showed an eagerness and willingness to learn more about military culture and asked for support and guidance from veterans regarding independent learning. |
|                                                         |           | • Asked for veteran leaders to review all recruitment material and interview guide. |
|                                                         |           | • Developed a culturally competent and friendly vocabulary. |
|                                                         |           | • Explicitly indicated to participants the researcher’s status as a nonmilitary member and asked participants to have patience and understand whether the researcher accidentally asked something inappropriate or culturally taboo. |
| Respect and safety                                      | POR       | • Was “vetted and vouch” for by veteran leaders. |
|                                                         |           | • Interviews held in a location and with persons selected by participants to ensure maximum comfort. |
|                                                         |           | • Safety plan developed in collaboration with veterans including regular check-in during the interviews and follow-up calls the next day and week after the interview. |
| Honoring what was shared                                | POR       | • Actively listened to what was shared and listening for emotional content within and behind stories. |
|                                                         |           | • Used reflective open-ended questions guided by what participants were sharing. |
|                                                         |           | • Expressed a nonjudgmental attitude. |
|                                                         |           | • Maintained field notes and significant memos to explore personal experiences, biases, and subjectivities. |
|                                                         |           | • Wrote a “thank-you” note or e-mail to each participant after the interview to share the researcher’s gratitude and what stood out for them from the participants’ stories. |
| Rigorous data method                                    | GT, POR   | • Variety of settings were used to collect data, precisely so that participants would feel most comfortable to share. |
| Flexible data collection methods                        | GT, POR   | • Data collection methods were also flexible with either interviews or focus groups. |
| Constant comparative method                             | GT        | • Initial coding that used in vivo codes (participants’ words and terminology) helped to keep the data veteran centered. |
| Using secondary sources for data                        | POR, GT   | • Critical incidents were compared between and across interviews to develop properties and categories. |
|                                                         |           | • This is allowed for the lead researcher to look beyond singular or repeated concepts and instead focus on underlying processes. |
|                                                         |           | • The lead researcher used recommended secondary sources (e.g., movies, books, articles, podcasts, interviews) from participants as part of the data collection. |
|                                                         |           | • Wrote memos regarding data that came from these sources. |

(continued)
could speak to the community about herself and the purpose of the research. Veteran leaders also agreed to help spread the word about this study through sending out e-mails to their group members indicating the lead author had been vetted, and they supported the research. However, the primary means of recruitment was snowball sampling whereby one veteran would speak to another veteran or put out a call via their own networks asking fellow veterans to participate.

As GT requires concurrent data collection and analysis, interviews were, whenever possible, spaced approximately 3 weeks apart. However, because of the difficulties associated with recruiting participants who have mental health challenges, interviews were conducted whenever participants felt they were ready or stable enough to do so. Moreover, based on the participants’ military training, when they volunteered they often wanted to do the interview immediately or the next day. Practically, this resulted in data often being collected in “clusters,” as it would be typical to have two to four interviews in the span of a fortnight and then have about a 3-month break as the data were analyzed.

To increase theoretical robustness and heterogeneity, potential participants with a variety of demographics and experiences were included to the extent possible. The inclusion criteria for participants were therefore broad and included: (1) all military ranks and roles provided they had combat experience, (2) women and other ethnic minorities, and (3) those with medical diagnoses related to their military service and those who self-identified as being impacted by their military deployment. However, it was also recognized that given the overall demographics of the Canadian veterans (Caucasian males aged 25–55), this study would likely still have a homogeneous population, which did indeed occur; however, there was considerable variation in participants’ military occupations, ranks, and from both reserve and regular forces.

### Robust Data Collection

Knowledge collection consisted of in-depth individual face-to-face interviews. Being aware of her status as a female civilian clinician and researcher, the lead researcher frequently discussed these issues openly and honestly both before and after the interviews. Many of the participants expressed an interest in knowing more about the researcher, specifically her views and opinions about the military, military operations (Afghanistan, Bosnia, Yugoslavia, and Rwanda), her views on guns, and so forth. Sometimes direct and shocking questions were asked to

| Principle or Values          | GT or POR | Summary of How Values Were Upheld in the Study                                                                 |
|-----------------------------|-----------|---------------------------------------------------------------------------------------------------------------|
| Memo-ing                    | GT, POR   | • Writing immediate memos after the interviews allowed the researcher to focus on key terms and concepts of the interviews.  |
|                             |           | • Helped to address and delimit personal subjectivities and biases.                                      |
|                             |           | • Provided a means by which to explore new and developing ideas and keep track of these ideas.             |
|                             |           | • Provided a rich data source to sort when begin to write the theory up and then start doing theoretical coding. |
| Fit and relevance           | GT, POR   | • Identified a core category that effectively summarized the overall experiences of veterans who could either successfully or unsuccessfully address their OSIs. |
|                             |           | • The theory has fit and relevance in that the data match participants’ experiences and address what they found to be most important. |
|                             |           | • Identified key underlying processes that occur to encourage participants to put value and importance on certain behaviors. |
| Emergence                   | GT, POR   | • Did not rush data analysis.                                                                                |
|                             |           | • Stayed in places of uncomfortableness and confusion.                                                       |
|                             |           | • Final theory and model did not go into places the research team initially suggested.                     |
| Researcher autonomy         | GT        | • The lead researcher conducted the data analysis independently, which helped to limit any outside influence concerning preconceived notions, concepts, or theories. |
|                             |           | • Not having veterans may have limited the analysis, notably “missing” data that only veterans would be able to identify or find important. |
|                             |           | • However, also allowed the researcher to look beyond individual stories and facts and search for the sociological and theoretical processes occurring across participants’ experience. |
| Member checking and consultation | POR   | • Showed the final theory and model to participants ensured that the proposed research accurately captured their lived experiences. |
|                             |           | • Ensured that the research has fulfilled the objective of discovering and answering what is most important to veterans. |

Note. POR = patient-oriented research; GT = grounded theory; OSI = operational stress injuries.
assess response and appropriateness, while other participants indicated they had down their own reconnaissance on the lead researcher through google searches and background checks prior to the interview. While at times intimidating, these questions and challenges were often a test of the lead author’s trustworthiness and credibility, prior to conducting the interview. However, once participants felt the researcher had “passed” this vetting process, participants spoke freely about their experiences and were visibly more relaxed after putting down their guard.

During the early stages of the data collection, despite developing a veteran-friendly semistructured interview guide, it became apparent that participants nonetheless struggled with the nature and language of the questions. Participants were averse to any “clinical” language related to their mental health, including the term “mental health” itself, with some participants showing contempt and becoming visibly aggravated. As a result, the lead researcher discussed these experiences with veteran leaders to ask for assistance. These leaders suggested that all clinical or medical language be removed and instead participants be encouraged to use their terms—specifically military terms—to describe their experiences. For example, mental health became “getting your shit together” as this is a military term that is used in basic training to denote whether you feel psychologically capable and ready. During later interviews, participants were surprised and pleased to have specific military terminology and slang used in the interview.

It was also recommended that participants be invited to tell stories about their experiences as soldiers as veterans frequently “swap stories” about their military service. Veteran leaders shared that participants may not have the vocabulary to adequately describe what they were experiencing particularly around mental or emotional health. This advice was extremely advantageous, as participants would often share that they did not know or have the words to completely express what they were feeling and would instead resort to telling stories about their military experiences. During these periods in the interviews, the lead author would listen intensely not only for the content but also for the emotions and values that participants appeared to be communicating. She also would reflect on what she thought she heard to the participants to ask for clarification and verification.

As per the agreement between the research team and veteran leaders, participants could choose the format of their data collection—an individual interview or group session. No participants asked for a focus group, though two participants asked to have their spouses present as emotional support during the interview. Interviews were also conducted in participants’ homes, coffee shops, fast-food restaurants, at the legion, in the park, and at the university. This flexibility in environment allowed for participants to feel comfortable in where and how they decided to share their knowledge. Interview times also needed to be flexible to being moved, as participants sometimes would agree to do an interview and then become psychologically unwell and unable to do so. These episodes could last days to months depending on the nature of the triggering event.

For example, two participants had agreed to take part in the research but were too unwell throughout the data collection period to give an interview.

Some participants struggled to remember the interview date because of issues with forgetfulness (often associated with posttraumatic stress disorder or traumatic brain injuries). To address this, the lead author developed a practice of texting or e-mailing the participant the day before to remind them of their interview. One participant forgot the interview 3 times, but upon realizing the third time called to ask whether the interview could be conducted right away so that he would not forget again. All participants were extremely dedicated to the research, and despite concerns that participants may give “properline” (data participants think the researcher wants to hear) or “vaguing out” (general unspecific data; Glaser, 1978), the opposite was found to be true. Participants gave extremely rich data and seemingly never avoided painful or awkward conversations.

Rigorous Data Analysis

Interviews were audio-recorded, transcribed, and analyzed per the procedures laid out by Glaser for classical GT: the constant comparative method, initial substantive (in-vivo) coding, identifying a core, selective coding and then finally theoretical coding. For the constant comparative method, participants’ experiences were coded using initial codes and continuously compared to each other to discover underlying categories. This process was done by hand and consisted of the lead author going through transcriptions and notes line by line, assigning codes for significant incidents (statements or events), and reflecting on whether these incidents were similar or different within and between interviews. To maximally honor what participants were sharing, these initial in-vivo codes used participants’ exact words and terminology. Using in-vivo codes was extremely helpful in the process of modifying and developing the questions for the next interview using the specific terminology used by veterans in previous interviews.

To assist in the data analysis, the lead author wrote memos. Memos are written to allow the researcher to express thoughts about the data and emerging conceptual categories as they are unfolding (Glaser, 1978). Memos became a prominent component of the data analysis process and were written almost daily. Memos were also written when secondary data sources were incorporated, such as after watching a film, listening to a podcast, or reading a social media blog recommended by participants. In the process of “sitting with the data,” the lead author would often reread or relisten to the interviews, mainly as new categories and theoretical connections were being developed. The lead author also reached out to veteran leaders for assistance when she needed clarification of an idea or term. These informal conversations were invaluable as they often provided a cultural perspective to the interviews, which would spark new ideas and concepts.

Employing classical GT modes of collecting data allowed for an active, iterative, and reflexive data analysis process...
throughout the research project. It was important for the lead author to spend time processing and working through the stories and experiences she heard and to reflect on her subjectivities, potential biases, and at times, emotional reactions. Working with combat veterans required deep emotional work, as she heard numerous disturbing stories: instances of abuse, genocide, mass killings, and torture. Equally, though, stories of heroism and extraordinary human capacity were shared causing wonder and amazement. These experiences left a profound and deep impact on the lead author. Writing memos is a rigorous methodological process in classical GT, and it provided a useful means of working through the experiences veterans shared. Furthermore, memo writing helped to create a record of how ideas emerged and eventually fit together theoretically.

Data analysis was the most challenging process to incorporate into POR principles. As discussed, Glaser maintains that it is essential during this period for the researcher not to share their working theory to preserve intellectual autonomy. Thus, following classical GT, and given this work was the lead author’s doctoral dissertation, data analysis was conducted independently without participants being involved. While this does not align with the fullest extent of POR, this independence was important to be able to look beyond individual interviews and think broadly about the issues that were driving participants’ problematic behaviors. However, the lead researcher did have informal conversations with participants throughout the data analysis process to help ensure the developing model and theory appropriately captured their experiences.

**Lessons Learned and Limitations**

The strengths of this research included both the methodological integration of a rigorous qualitative data method—classical GT—to a POR approach to discover what remains most problematic for Canadian combat veterans living with an OSI. The success of the merging of these research approaches was in part due to the ability of the research team to develop and maintain a high level of trust and credibility within an insular population such that participants could share authentically and for the research team to discover rich, relevant data. Obtaining this level of rich data would likely not have been possible had the researchers not adopted a POR approach throughout the research project.

The results of this study also have immediate value and the potential to be used within both practice and policy. By focusing on what veterans deemed to be most problematic, this study identified factors impacting the multidimensional experiences of veterans’ psychological and social health and well-being. In this, specific and targeted interventions can be developed, which addresses these identified factors. Moreover, conducting a study that uses both POR and classical GT allowed for the end users (veterans) to be empowered to better understand and create solutions to the phenomenon of study (Parry, Salsbery, & Macaulay, 2006). Through integrating veterans’ knowledge and expertise of living with an OSI, it is hoped this research and similar POR projects will motivate policy makers and researchers to further engage veterans as equal partners within research. Veterans, because of their military training, are incredibly driven to care for and support their fellow peers and thus represent a significant underutilized resource within research and policy development.

There are a few limitations to be considered from POR method perspective. First, as noted, this study did not have the highest levels of patient engagement— “empower/lead”— where participants are supported to make decisions and lead research activities. Second, there were also limitations associated with the tensions between POR and classical GT, specifically with full patient engagement, which was also complicated by this project being the lead author’s doctoral research. Third, this meant that the data collection and analysis components were done without veterans being directly involved. Fourth, there were no veterans or persons with military experience on the research team. Future research should include veterans throughout the data collection and analysis phases as it could be fascinating to compare whether veterans share different information to a fellow veteran and whether they see different information than civilian researchers in the data analysis.

**Conclusion**

Conducting a patient-oriented classical GT study in veteran’s mental health has excellent value because to date, there have been no studies that the authors are aware of which have explicitly sought the perspective of veterans themselves regarding what was most injurious during their military employment and what elements continue to remain problematic for their care. Adopting a POR approach for this research helped to establish trust and credibility allowing the research team to gain rich, in-depth data for analysis. The success of this project was built upon taking the time to develop strong research relationships within the local community, particularly with veteran leaders, so that the research design, recruitment strategies, and data collection methods were relevant and veteran-friendly in their approach. Given the serious nature of combat and the impact that it can have not only on individual veterans but also their families and societal resources, researchers have a responsibility to develop knowledge that adequately addresses veterans’ mental health symptoms, improves therapeutic quality, and promotes overall health and well-being as expressed by veterans themselves.

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